

# MANUFACTURERS' RECORD.

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BALTIMORE, JANUARY 19, 1894.

IN view of the vital interest of the present tariff discussion to the South, the MANUFACTURERS' RECORD has established an office in Washington in the Rapley Building, over the new National Theatre, in charge of Mr. Thos. P. Grasty. The MANUFACTURERS' RECORD extends a hearty invitation to all Southern business men, especially those interested in industrial matters, to make its Washington office their headquarters while in that city.

"It's the early bird that catches the worm." A rumor is current at Washington that the government may establish a Southern department for the army. The Young Men's Business League of Augusta, Ga., has heard of the rumor and has already begun to "pull wires" to have the headquarters located in that city in case the department is created. It is this policy of taking hold of a matter early in the day that has made Augusta and her business men so successful in their projects.

THE present output of pig iron is at the rate of only 5,000,000 tons a year, or a little less than 100,000 tons a week. The report of the Iron Age shows the furnaces in blast and their weekly production on January 1 as follows:

Fuel.	Furnaces.	Weekly output.
Anthracite .....	31	13,081
Coke .....	80	81,997
Charcoal .....	21	4,009
Total .....	130	99,087

The position of stocks, sold and unsold, January 1 was as follows:

Stocks.	Oct. 1. Tons.	Nov. 1. Tons.	Dec. 1. Tons.	Jan. 1. Tons.
Anthracite pig..	121,597	134,157	134,475	145,197
Coke pig. ....	532,157	503,806	485,292	486,987
Charcoal pig....	199,008	200,450	199,220	206,260
Totals .....	852,762	838,413	818,987	838,444

## The South and the Tariff Bill.

Gradually one paper after another in the South is coming to look upon the Wilson tariff bill in its present shape just as the MANUFACTURERS' RECORD has done since the day when the bill was first made public. Despite the ridiculous assertion of some papers that because this measure was proposed by a democratic committee it must necessarily be perfect, as though the committee was absolutely infallible, some of the foremost democratic papers of the country are beginning to criticize it and to show that it is unjust to the South and that it must be revised.

The Norfolk Virginian in a recent issue, in discussing the subject, referring to the position taken by Mr. Wilson several years ago, "that free coal would be a discrimination against the interests of Virginia," said: "The position then occupied by Mr. Wilson was in the straight line of tariff reform. His present bill contains the irregularities and discriminations he then protested against—irregularities and discriminations which bear with great pressure upon his own State and section. Let this uneven and unjust feature be removed; let the reform be made so as not to retard; let no one section of the country be protected to the detriment of another—no South against the North, no East against the West, but all upon an equal basis. This is democratic dogma; it is the principle the Virginian advocates and supports."

It is against such discrimination as this that the MANUFACTURERS' RECORD has been so persistently working, and, while it regrets the necessity of presenting the matter from a sectional standpoint, it has been compelled to show how unfair this bill is to the South, and how the interest of this section would be sacrificed for the benefit of others. The present cry of some of the rampant free-trade papers of the South against any man who dared raise his voice in protest against this bill will soon have little reason for existence, so rapidly is public sentiment crystallizing throughout the South. Last week the Norfolk Chamber of Commerce unanimously protested against free ore, free coal and free lumber, and the Richmond Tobacco Exchange has taken its stand against the bill as to tobacco and cigarettes. With the business interest of the whole South at stake, it behooves the business men of this section to discuss the tariff issue from a business point of view.

THAT brilliant but erratic genius, the "Star-Eyed Goddess," Col. Henri Watterson, accuses the MANUFACTURERS' RECORD of being a meddling mischief-maker. We suppose Colonel Henri's anger has been aroused because the MANUFACTURERS' RECORD has dared to claim that the committee

of ways and means was not infallible. Well, the MANUFACTURERS' RECORD is very willing to be a meddling mischief-maker if by that means it can help to prevent the passage of a bill which in its present shape would mean serious injury to many Southern interests.

## The Nicaragua Canal.

The great interest that is now being centred in the discussion of the tariff so absorbs the country that comparatively little attention has recently been given to a subject of almost equally vital importance, that is, the construction of the Nicaragua Canal. This gigantic undertaking, equaling, if not surpassing, in importance the construction of the first Pacific railroad, ought to be carried out promptly by government aid. Its construction would soon completely unite and harmonize the development of all sections. It would give to every part of the country a symmetrical growth; develop the Pacific coast; revive the interior sections now so hampered by long railroad hauls; give new life and energy to the industrial and shipping interests of the whole South, and make the Gulf of Mexico the centre of a greater commerce than any part of our country has ever seen. From the first year of its completion it would annually create more wealth than its entire cost. It behooves the American people to insist upon some congressional action that will result in the early building of this canal.

## A New Source of Wealth for the South.

IN this issue of the MANUFACTURERS' RECORD Mr. Edward Atkinson, who is ever seeking to study out new means of increasing the productive interests of the country, presents an exceedingly interesting article upon the possibility of peanut cultivation in the South. Mr. Atkinson takes the ground that there is greater wealth-creating capabilities in this industry—using the peanuts merely for the manufacturing of oil—than there ever was in the cottonseed-oil industry. In a private letter regarding this article, Mr. Atkinson says: "The more I deal with these nitrogenous plants deriving their nitrogen from the atmosphere, the more it becomes apparent that the whole system of English political economy will be revolutionized, the Malthusian dogma disappear, the Ricardian theory of rent vanish and the so-called law of diminishing returns from lands is reversed. In this view the peanut article becomes the beginning of a discussion of paramount importance."

The more the agricultural interests of the South are investigated the more wonderful are the possibilities which are developed. The growth of the cottonseed-oil business is only one illustration of the many as yet undeveloped sources of Southern wealth.

## America's Mercantile Marine.

In a discussion of the merchant marine interests of this country, the Social Economist, of New York, referring to the statement made in a book recently published by W. W. Bates, late United States commissioner of navigation, to the effect that the loss to this country by reason of permitting our carrying trade to be done by foreign vessels aggregates about \$180,000,000 a year, suggests that the awakening of the country to the importance of this subject will eventually be brought about by the power of the great through-line American railroads. "These roads," says the Economist, "have heretofore been competing for traffic between the East and the West, and the natural order of things will soon force them to compete for traffic across the Atlantic, and whenever this competition assumes large proportions the railroad that first 'pools,' and then consolidates with or buys in or builds a leading line of ocean steamers, will get ahead. When one trunk line has invested in a line of fast transatlantic steamers others will follow suit until the lines of continuous consolidation of steamers and railways girdle the earth. As the larger must swallow the smaller, the ultimate destiny of transatlantic steamers is to be owned by American railways."

While this view of the situation has not heretofore been presented so clearly in public discussion, yet this work of consolidation or "pooling" with the steamers has for some time been commanding the attention of railroad officials. Many years ago the Baltimore & Ohio Railroad commenced the development of the transatlantic steamer business of Baltimore by means of ownership in direct lines of steamers to Bremen and Liverpool, and it has since continued to work in the same direction. Other roads have done the same thing, the most recent having been the action of the Chesapeake & Ohio in the organization of a company to build six first-class steamers to run directly in connection with and practically as a part of the Chesapeake & Ohio through route between Newport News and Great Britain. Unfortunately, however, these steamers have all sailed under the British flag, and no means has yet been put in operation to bring about the development of our own merchant marine. While the railroads have undertaken the development of the transatlantic trade by steamers in which they are interested, the steamers do not carry our flag. One of the great questions that faces the American people today, as it has for some years past, is such legislation as will bring about a revival of our mercantile marine and give to our country the enormous sums now annually paid to foreign vessels. That a country of nearly 70,000,000 people, developing more rapidly than any other country in

the world has ever done, should be content to do all of its trading outside of its own shore line by means of foreign vessels is one of the amazing things of our history.

#### Government Aid for the Atlanta Exposition.

The Atlanta Exposition ought to receive the very liberal financial support of the general government. Its influence upon the progress of the South will doubtless be so great as to mark a new period from which to date all the future advancement of the South. The development of the South is essential to national prosperity and to a well-rounded growth of all sections. It was one of the pet hobbies of the late Hon. Wm. D. Kelley, of Pennsylvania, that the "development of the South means the enrichment of the nation," and he wrote for the MANUFACTURERS' RECORD several articles based on this at a time when he was far in advance of the general sentiment of his own people. The great industrial advance of this section is furnishing a field of activity for the surplus capital and energy of the North and West, and soon the movement of capital will be followed by a great Southward move of population. Because of these facts, and because of the precedents with former expositions, Congress should deal with the Atlanta Exposition on a very broad and liberal scale.

#### Inquiries About the South.

It takes but little to arouse outside interest in Southern cities. If attention is once called to their merits as places of residence, the number of people who write to inquire about them is astonishing. In a recent letter to the editor of the MANUFACTURERS' RECORD Mr. H. C. Middleton, secretary of the Young Men's Business League of Augusta, Ga., writes:

We receive hundreds of letters from all over the Northern and Eastern States from people looking in this direction—parties wishing to go into all kinds of enterprises from a rural to manufacturing and land development. We are organizing a big land and immigration company to own and control country lands in a radius of 100 miles from Augusta, and every Southern city should act in the same way. These companies can acquire lands cheap and sell them cheap on easy terms, but nevertheless make a neat profit, and thus make it to their interest to induce immigration and help our country.

#### What Working Together Does.

The Commercial League of Little Rock, Ark., is among the organizations of wide-awake, energetic citizens who believe in the theory that whatever helps their city helps them. Only a few weeks ago a proposition was made to Little Rock to build a railroad to Hot Springs if the cities would raise \$125,000 as a bonus. Little Rock's share was \$75,000. The Commercial League took the matter in hand at once, held public meetings, thoroughly advertised the advantages the road would give the people, organized soliciting committees who not only called on every business man, but most of the other residents of the city. Everyone was asked to contribute what they could. In two weeks about \$50,000 had been pledged, and the canvassers had interviewed about all the prominent residents. Apparently this was all that could be raised. The league didn't think so, however. It put out more committees. Those who had refused to

subscribe were again called upon. More meetings were held. Former residents of the city were telegraphed for subscriptions, and several responded. What is the result? The league has succeeded, where individuals would have failed. Just to give an idea of the energy it displayed, fifty committees were at work at one time. These committees secured \$18,000 in subscriptions in one day.

Here is an example for other Southern cities to follow. Such a body of men Little Rock and the South may well be proud of.

#### Make Furniture at Home.

Arguments in favor of establishing furniture factories in the South are not new. Readers of the MANUFACTURERS' RECORD are well aware that such enterprises have been warmly advocated from time to time by this journal, but from time to time fresh facts come to light which show beyond a doubt that there are large profits to be realized from this industry in the South if it is properly conducted. At the Augusta Exposition one of the most notable displays was that made by a Greenville (S. C.) company. It included mantels, desks, church and house furniture made from pine, poplar, chestnut, walnut, cherry, oak, ash and other woods cut in forests in the same State where the factory is located. Much of the timber is near the town. Visitors were surprised at the finish and workmanship displayed in the articles, which were equal and in many cases superior to Northern furniture also on display.

Here was an object-lesson of what can be accomplished at home. Today every lumber State in the South is shipping carloads of lumber to Northern factories, which is converted into furniture and returned to be sold at a profit, which the customer must pay in addition to freight charges both ways and the incidental expenses of transfer, saying nothing of the middleman's profit in case the goods are sold on consignment. What is to prevent Southern people from making their own furniture? They have the material, cheap power, the railroad facilities, and if skilled labor cannot be had at home, it can be easily and quickly secured from the unemployed in the North. A few years ago Southern farmers thought it necessary to buy food products in the West, but now they have been educated to grow them at home and save the money.

The people must have furniture. Why not make that at home?

#### Senator Gorman in 1889 on Free Coal.

As I have before said, there never was a democratic statesman, there never has been a President elected by the democratic party, or a Secretary of the Treasury, or a committee of either branch of Congress that was controlled by democrats, knowing that revenue must be raised from the tariff, who ever dreamed of putting coal upon the free list.

And yet because the Wilson bill proposes to put coal on the free list, Southern papers proclaim that it is heresy to oppose it. Isn't Senator Gorman a pretty good democrat?

FOLLOWING the announcement of new hotels for New Orleans and Charleston comes the report that \$100,000 is to be spent in improving and enlarging the Battle House in Mobile.

#### THE WEEK IN THE SOUTH.

##### Condition of Business and the Latest Features of Southern Progress Summarized.

The slight general improvement reported in business is more pronounced in the South than elsewhere. In that section several money centres report funds more plentiful and an increased demand for staple goods. A good many cotton mills are behind their orders. Cotton and rice have risen in price, and the market for each has more tone. Several large building enterprises, such as hotels, etc., are now fairly under way, and two or three important railroad projects have been definitely decided upon. A land deal, involving 2,000,000 acres, has been closed in Florida, which is to be developed by Northern capital.

Reports of the iron market seem to indicate some improvement in demand though none in prices yet. A few furnaces have gone into blast, and it is reported that several others will shortly blow in. Several other large enterprises employing over 2000 hands have started up. The annual meetings of many cotton-manufacturing companies were held during the week and dividends declared, in most cases the amount being either 4 or 5 per cent. for the half-year, making 8 and 10 per cent. for 1893, despite the financial depression. The lumber and phosphate markets show a rather larger volume of trade, though there is some complaint in the lumber interests of uncertainty on account of the tariff. There was a decided increase during the week in the number of industrial enterprises definitely organized, and among the leading ones reported were a \$400,000 cotton mill, a \$100,000 hosiery factory, an addition of \$75,000 of capital to a cotton mill for improvements, five lumber companies with an aggregate capital of \$200,000, a \$15,000 coal-mining company, paint works and fibre works, each to employ fifty hands, a \$25,000 carriage company, a \$100,000 marble mill and a quarry company, a \$10,000 flour mill, \$100,000 nut-lock company, a \$50,000 iron company, a \$500,000 company to build cigar factories, an ice factory and a hotel in Florida, a \$15,000 glass-making company, a shoe factory and several electric-light and ice companies, etc.

THE new plant of the Lenoir Car Co., at Lenoir, Tenn., is rapidly nearing completion. The main building is 92x454 feet; blacksmith and ironworking shop, now complete, is 70x260 feet; the power-house is also complete, and is 62x66 feet; boilers are up and the engines are in place. The woodworking shop, 100x300 feet, has foundation finished, and the trusses and other parts are being prepared as rapidly as possible. The erecting shop is to be 120x300 feet, and the foundation is only partly in, but the work will be pushed. Eight or ten carloads of machinery, tools and other equipment have already arrived, and most of the balance is under contract. It will be some time yet before the plant is completed and all the machinery in place.

At the instance of the Columbia Finance & Trust Co. of Louisville the federal court has appointed O. M. Woodbury, of Middleborough, Ky., receiver of the Mingo Mountain Coal & Coke Co. of that place. This concern has been operating in Kentucky for several years, and in 1890 issued first mortgage bonds for \$100,000, and a similar issue was made in 1893. The interest on these bonds, 7 per cent., payable semi annually, was defaulted twice.

MESSRS. MONGER & Co., of Sanford, N. C., have formed a partnership for the transaction of an auction and hardware business, and have secured already a warehouse for storing goods.

#### The Peanut Considered as a Potential of Wealth.

By Edward Atkinson.

The busy man whose time is mostly occupied in the details of every-day work, and who cannot go far away from it for recreation, may yet get great enjoyment in finding out what his own work really is. Acting upon this line when I was directing the spinning of cotton, I long since happened to ask myself how and why does cotton spin, and what is it? On putting that question, of how and why does cotton spin? to a meeting of about 100 practical spinners, I found that at that time only one knew the real form and structure of the cotton fibre. All the rest thought that the adhesion of fibre to fibre was by way of barbs or hooks, corresponding to those on feathers or on the beard of rye. One only, the late Governor Straw, long time agent of the Amoskeag Manufacturing Co., had the right conception of the twisted form of each fibre of cotton itself, the convolutions interlocking and rendering it capable of being spun even by hand.

This investigation led me to a more complete study of the conditions, the growth and the character of the cotton plant itself. My attention was at once called to the properties of the cottonseed, then worse than wasted. I found various analyses in De Bow's Review and in various books upon the cotton of India and Egypt. Upon compiling the data it then appeared that the seed contained a very great amount of the most valuable elements of nutrition, the oil itself being a food oil, the oilcake and meal being among the richest kinds of food for cattle. I learned that the seed had been utilized for centuries in China and India, but that there was no popular information on the subject in this country. The sugar-cane of the island of Formosa had been fertilized with cottonseed and bean meal for centuries. On the basis of these facts I ventured, in 1861, to forecast the development of the cottonseed-oil industry in a manner which has been singularly and completely justified.

One of the incidents which has lately come to my knowledge gives a curious support to my forecast of the food value of cottonseed. Soon after the product had become developed in sufficient measure it was used in large quantity in the manufacture of lard in Chicago. For a time the word "adulteration" was applied to this process. Presently there came a short crop of cotton and a scarcity of oil, which compelled converters to ship pure lard, free of any cottonseed product, on their foreign contracts. Upon the arrival of this unadulterated pure hog's lard in European markets thousands of tierces were rejected. It was not up to the standard of the quality of a few previous years, and very heavy losses were incurred by the shippers. Since then the word adulteration has ceased to be used in connection with cottonseed products.

In one Southern address given many years since I remarked that if the North could produce a plant yielding oil in proportion to the cotton plant, but without lint, it would soon become a most valuable crop. That statement again has since been justified by the development of the flax cultivation in the West and Northwest simply for the purpose of yielding linseed oil and oilcake, the right method of dealing cheaply or commercially with the fibre in the stalk of the flax plant grown in this country not having yet been discovered. These stalks are still, I believe, nearly all burned or got rid of in the easiest way. They will ere long become valuable.

The secondary products of cottonseed and linseed is the oilcake and the oilcake meal. The following statement, taken from the forthcoming report of the foreign commerce of the United States, of the exports only of this valuable foodstuff will

bring its importance into conspicuous notice:

EXPORTS OF OILCAKE AND OILCAKE MEAL FROM THE UNITED STATES.

Year ending June 30.	Total Pounds.	United Kingdom Pounds.	Germany Pounds.	Belgium Pounds.	Netherlands Pounds.
1873.	194,318,946	188,852,693			
1874.	215,336,380	210,059,662	184,511		
1875.	247,046,095	210,805,335	1,281,600		
1876.	287,119,800	281,466,910	22,450		
1877.	273,670,940	268,703,276			
1878.	342,446,439	332,519,447	67,451	1,189,440	2,205
1879.	340,995,395	332,681,499	399,494	16,395	
1880.	453,943,395	444,293,863	3,214,817	104,530	40,000
1881.	453,943,395	428,317,167	5,282,485	210,350	1,100,045
1882.	421,269,116	363,349,009	41,955,868	1,840,260	3,167,497
1883.	457,704,800	385,588,245	55,687,968	189,095	853,040
1884.	524,847,331	410,121,249	87,871,247	424,000	373,588
1885.	498,664,241	415,417,475	56,919,967	2,465,325	11,009
1886.	585,947,181	487,971,744	73,475,794	6,568,039	1,884,076
1887.	622,995,233	518,110,382	66,340,450	16,707,426	4,928,023
1888.	562,744,269	431,764,443	75,108,492	28,234,256	2,152,718
1889.	588,317,880	412,668,708	115,381,927	27,884,670	9,014,685
1890.	711,704,373	488,052,995	143,942,782	37,086,734	8,944,535
1891.	633,344,851	421,672,957	120,083,241	44,231,340	14,221,389
1892.	826,398,719	475,681,552	205,405,517	74,734,295	36,786,500
1893.	802,416,067	394,846,773	223,226,699	75,333,321	71,484,601

In recent years my odd hours of leisure have been devoted mainly to the study of the nutrition of the soil, the plant, the beast and the man. My attention was early called to the singular properties of the leguminous plants, of which the cow-peas, beans and peanuts are varieties, in deriving nitrogen from the atmosphere through the agency of bacteria, thus becoming of the greatest value as fodder plants, and also as soil-renovating plants, nitrogen being an essential and costly element in all nutrition of every kind.

The value of the cow-pea vine as a soil renovator has long been empirically known throughout the Southern States, but the difficulty of obtaining exact data on the subject and of learning about the relative value of the different kinds of beans and peas led me to write my first article for the MANUFACTURERS' RECORD under the title, "Does the South Know Beans?" The conclusion to which I have been brought is that most of the people of the South know less about beans, peas and peanuts than the ryots or coolies of India, the peasants of China and Japan or the negroes of central Africa. This is rather a hard statement, but I shall submit evidence to that effect.

I have been able to get the address of but one establishment in this country where oil is extracted from peanuts. On application to that source for samples of oil and meal it was denied lest I should disclose some of the secrets of the business.

Fortunately, however, there has been a most exhaustive study of this matter on a truly scientific basis, by which more complete data are given than those which existed in regard to cottonseed in 1861. Upon these data I have ventured again to forecast the development of the peanut-oil and oilcake industry.

The agricultural experiment station of the University of Tennessee, at Knoxville, has for the last few years been under the charge of Dr. C. W. Dabney, who is now assistant secretary of the Department of Agriculture. Bulletin No. 2 of volume No. IV, 1891, prepared at the station by Mr. L. P. Brown, acting chemist, deals exclusively with the peanut and contains all the information necessary to compute the future value of this plant.

The development of this industry will of necessity be much slower than that of the cottonseed-oil, because in that development a vast waste product already existed, easily drawn upon as raw material in the manufacture of oil and cake. In the case of the peanut only a small product is now grown; therefore the crop must be increased with special reference to its use for oil, oilcake and fodder, far beyond its mere consumption as a nut.

This may be as surely accomplished among intelligent farmers as it has been in the development of the flax plant in the West. The peanut has an immense advantage over the flax plant in the fact that after the nuts have been removed for conversion a heavy product of most valuable fodder remains, equal in its nutritive

value to the most nitrogenous crops which are now raised for fodder only, such as

clover and alfalfa.

All this is made plain in this most exhaustive monograph to which I have referred. It may lead intelligent farmers to take the matter up for further investigation.

Before doing so, however, attention should be called to the sharp northerly trend of the isothermal lines. Reference to any of the various charts on climatology will show that the isothermal lines west of the Appalachian chain make a very sharp trend northward from the States in which the peanut is now successfully cultivated into Indiana, Illinois and Iowa. It may happen that the cultivation of the peanut may be extended much farther north than it has ever been; it may happen also that among the different varieties of the peanut there are some that requires a shorter season than others.

The points which are indicated in this monograph that can be put into concise form are:

1. The crop of nuts is relatively greater on poor than on rich soil; the crop of fodder greater on rich than on poor land.

2. The plant appears to have the greatest power of any one yet observed in drawing nitrogen from the atmosphere through the intervention of bacteria.

3. The fertilizers needed are therefore of the cheaper kinds rather than the dearer nitrogenous fertilizers.

4. The cultivation appears to be very easy and simple, and not more costly than many other field crops.

5. If raised for oil and meal some of the coarser and ranker varieties of the nuts may be grown, and it is apparent that the harvesting of the nuts will require much less care and cost for conversion to oil than is required when they are gathered for sale as nuts.

6. In one example of intelligent cultivation by Dr. W. L. Walker, of Whitfield, Tenn., the product is stated in the following terms: "My peanut hay generally yields me about two tons to the acre, and I rarely raise less than sixty bushels of peas to the acre, often getting seventy-five."

Hon. S. G. Jones, of Buffalo, Humphreys county, Tenn., gives his results in the following words:

"In ordinary years the bottom lands, with a small admixture of sand, make the best yield both in quantity and quality, averaging about sixty bushels per acre. In wet years, however, the clay uplands make the best yield and brightest nuts. The hay is very fine for cattle, especially milk cows, making an abundant flow of rich milk. If fed to horses it should be put on the ground or in the manger, for if they take it from a rack above them they get a great deal of dust along with it; this often produces a cough by getting into the windpipe. The peas themselves are fine for hogs. It is probable that when prices are low it will pay the farmer better to turn his hogs into the field than to dig them himself. But, however this may be, when I am through picking and gathering my

corn I turn my hogs into the fields and let them feed upon the scattered nuts. Hogs fatten on them in a few weeks."

The statement of the quantity of fodder referred to by Dr. Walker as a secondary product is rather astounding. Hay land in the North under the highest cultivation often fails to yield an average of two tons of hay to the acre; such a crop is an exceptional one. Yet hay is one of the great stand-bys of Northern farmers, the value of the hay crop customarily coming next to the value of the corn crop, and far exceeding the value of the cotton crop of the South. If such a crop of peanut hay can be grown with sixty to seventy bushels of nuts in addition, what does it mean?

Your space will limit me to one analysis from the monograph to which I have referred, and that I will now give:

AGRICULTURAL EXPERIMENT STATION, TENNESSEE.

1. Our analysis, kernels of Tennessee peanuts, re-cleaned white, crop 1888.
2. Our analysis, kernels of Tennessee peanuts, farmers' stock, white nuts, crop 1889.
3. Kernels of Congo peanuts. See *Chemie der Menschlichen Nahrungs- und Genussmittel*, Dr. J. Koenig, page 610.
4. Kernels of Japanese peanuts. Same page, 610.
5. Kernels of cottonseed. See North Carolina annual report for 1882.

	In 100 Parts of Dry Matter There Are:					
	Moisture.	Protein or Albuminoids.	Ether Extract or Fats.	Nitrogen Free Extracts (Carbohydrates).	Crude Fibre.	Crude Ash.
1. Kern' of peanuts, crop 1888.	3.87	28.65	49.35	17.23	2.37	2.40
2. Kern' of peanuts, crop 1889.	4.88	27.07	48.60	19.30	2.52	2.51
3. Kernel of Congo p'nuts	5.01	28.02	52.87	14.83	1.55	2.73
4. Kernel of Japan peanuts.	15.61	32.66	54.54	5.99	4.88	1.93
5. Kernel of cottonseed	6.27	31.21	39.00	20.82	4.07	4.30

"The analyses in this table show the peanut to be a rich foodstuff. Of crude protein it contains a percentage equal to that found in the kernel of cottonseed, and of crude fat a much larger percentage. Should they ever become sufficiently cheap they would doubtless make an excellent food for stock, after being properly mixed with some less concentrated food. The kernels of this nut contain from 45 to 50 per cent. of oil of very fine quality. When this oil is extracted and the residue ground into meal, a very fine article of stock food is obtained. This method of utilizing the seed is practiced in this country to a very limited extent, if at all, owing to the cheapness of cottonseed. In France, however, large quantities of the oil are extracted for adulterating olive oil and making soap, and the resulting meal is extensively used as a food for stock."

I have submitted these data to Mr. Andrew H. Ward, who is not only an able agricultural chemist, but who has also had a long experience in importing and dealing in oils, drugs and chemicals, he having in former years imported peanut oil from France. He has given me a formula for a suitable fertilizer per acre of peanuts on the kind of land which seems to be best fitted for abundant production:

100 lbs. nitrate of soda at 2 cts. a pound. .... \$2.00  
200 lbs. powdered phosphate at 1/2 cts. a pound. .... 1.00  
Total per acre. .... \$3.00

The constituents of this quantity would be:

15 pounds of nitrogen.  
35 pounds of soda, equal to 52 pounds of potash.  
60 pounds of phosphoric acid.  
110 pounds of lime.

Therein corresponding very closely to the type of fertilizers suggested for use in this monograph.

Mr. Ward informs me that peanut oil closely resembles olive oil in being a non-oxidizing or non-drying oil which can be

used in the woolen manufacture, where cottonseed oil, owing to its rapid oxidation, cannot be used. Cottonseed oil more closely resembles linseed oil in this dangerous particular. In one instance a woolen manufacturer wanted some olive oil, and Mr. Ward happened to be out of the right quality. He, therefore, substituted peanut oil, but the buyer invoiced it to the mill as olive oil, so that there should be no prejudice created on the part of the carder. It went through without any comment.

It should be remarked that when the oil only is sold nothing is removed from the soil. If the cake and fodder are fed to stock on the same farm, more than all will be restored to the land that had been taken from it in the process of cultivation, because the larger portion of the nitrogen will have been derived from the atmosphere.

I have previously made the somewhat severe remark that the intelligent people of this country know less of the value of the peanut than the ryots of India, the peasants of China and Japan or the negroes of central Africa. In support of this statement I now submit a communication which has been procured for me by Mr. Ward from a gentleman of long experience in the African trade:

"BOSTON, December 26, 1893.

"A. H. Ward, Esq.:

"Dear Sir—With reference to the growth and disposition of peanuts, known in the principal country of their growth as ground-nuts; the bulk of them, say 90 per cent., are grown on the west coast of Africa, and in the main for the oil to be found in them, the chief ports of export being Bathurst, at the mouth of the Gambia river; St. Leonis, at the mouth of the Senegal river, and Goree, an island seven miles from the mainland, about midway between the rivers above mentioned. The nuts are raised by the natives of different tribes in the country back from both sides of the river and for quite a distance up the rivers, always near enough to the rivers or bodies of water to catch the evening dews rising from the water. When gathered they are transported on flat boats in bulk and bags down the rivers to the ports referred to above. Here they are stored temporarily in large warehouses built of fire-brick (weather-proof), and shipped thence mostly to the ports of Bordeaux and Marseilles by the agents of French houses or factories at these cities. A large fleet of vessels is required to convey these nuts in their season to France. The trading between the agents and growers of the nuts is almost exclusively one of barter. The goods received by the natives in exchange are manufactures of France, Great Britain and Germany, and varied in their character according to the intelligence and local environment or needs of the native, comprising such articles as beads to firearms and tobacco to muslins.

"The natives bake and eat the nuts as food where they are grown, quite regardless of quality. The only locality where the nut is grown suitable for this market (United States) as an edible is at a place called Rhufisque, which is near Goree, the amount being inconsiderable. The Rhufisque nut, however, will compare favorably with our North Carolina peanut in size, delicacy of flavor and freedom from the oil so abundant in the common nut of commerce. The oil is expressed and treated by the French enters into all the principal trades, in some being an important factor.

"In the cultivation of the groundnut a light, friable soil is needed, with plenty of heat and some moisture, so it will be found that the larger portion of the nuts raised are grown along the southern edge of the Sahara desert, and I may add that the most wealthy portion of the so-called uncivilized portion of Africa is within the producing nut regions. T. H. DUNHAM."

In support of this statement I may refer

to the report of Consul Trail, of Marseilles, No. 142, July, 1892, Department of State. This report covers the manufacture of vegetable oils in Marseilles, and from this it appears that the import of *shelled* peanuts in the year 1890 amounted to over 2000 tons, in addition to which about 200 tons were imported in the husk.

With this incomplete digest of information which has long been within the reach of any seeker for development of new industries in the South, I rest my prediction that there is a greater potential of future wealth and welfare in the peanut than there was in the cottonseed but a few years since.

I will now venture to put another conundrum to your readers, a very audacious one, "*Does the South know sweet potatoes?*"

If I am rightly informed, more starch can be obtained from an acre of Southern sweet potatoes than from an acre of Northern white potatoes, or from an acre of Western corn. The manufacture of starch is a very important industry, the two principal sources now being potatoes and Indian corn, a little starch of extra quality being made from wheat for the finest laundry purposes.

I have also reason to believe that there is more glucose in an acre of Southern sweet potatoes than in an acre of Western corn. Glucose, again, is one of the most recently developed branches of industry in several of the Northern States. The importance of glucose is witnessed in the mere export. On that subject I submit a paragraph from the forthcoming report on the commerce of the United States:

"Among the lesser products of export must be counted glucose, a commodity that has come into great favor since 1885 in a few markets, where it has also met a constantly increasing demand. In 1885 the quantity exported was 1,825,795 pounds, a year of comparatively small export, as it showed only one-fourth the result of the previous year's exports. This year is, however, convenient for a starting-point, and the export has steadily increased by leaps and bounds since that year, until in 1893 it passed for the first time 100,000,000 pounds, or to be accurate, 101,546,814 pounds. Nearly the whole of this goes to the United Kingdom, where 96,639,862 pounds found sale in the last year. Belgium received 1,132,310 pounds; Germany, 764,688 pounds, and Australasia, 2,063,229 pounds. An export of this article was first noted in the returns of 1881, where the quantity was 13,260,184. The increase in thirteen years has thus been upwards of 765 per cent., while the value has risen from less than a half a million (\$451,415) in 1881 to more than \$2,300,000 in 1893."

The writer of the preceding letter regards this statement of imports as probably very much less than the facts would warrant.

Is it not judicious on the part of the citizens of States where capital is no yet abundant to look into these lesser products, which require moderate capital in proportion to the production, rather than to undertake for the present the more complex departments in manufacturing, which require very large investments in capital in ratio to the annual product, or to the number of persons employed in them? It has always seemed to me that the beginning in manufacturing might well be made in the lesser industries, such as starch and other relatively simple products, deferring until a later period other enterprises which are not as simple and which require vastly more capital.

It will, of course, be useless for Southern farmers to enter into competition with the peasants of India, the negroes of Africa or the fellahin of Egypt if the peanut crop and the sweet potato are to be as barbarously treated in this country as the bale of cotton is in comparison with the cotton of India and of Africa. Witness the photograph giving testimony to the wastefully bad method in

the treatment of American cotton which was given by photographic examples of the aspect of the Indian, Egyptian and American bales in a late number of the MANUFACTURERS' RECORD.

All of which is respectfully submitted to whomsoever it may concern.

Boston, January 1.

### GOLD-MINING IN THE SOUTH.

#### The Reasons for Past Failures and for Future Successes.

Editor Manufacturers' Record:

THE MANUFACTURERS' RECORD, in its issue of December 22, writing on gold-mining in the South, says, and rightly, too, "there is no question in the minds of anyone as to the abundance of gold-bearing ores in the South, and that it is only a question of their proper extraction, and when this has been accomplished, as it will be, there will be a solid basis for a very extensive gold-mining business that will yield large returns." This might leave upon the minds of the readers of the MANUFACTURERS' RECORD the impression that there is yet some question to be solved or some method yet to be applied before there is a solid basis for investment in Southern gold-mining. From a thorough knowledge of the field, its possibilities and the causes of failures in the past, I feel justified in the assertion that all question as to the successful treatment of the ores is a thing of the past, and that reasonable judgment, backed by sufficient capital to carry on the business, is all that is needed to establish the proper basis; in fact, the basis is there, and the Southern field today presents to the gold-miner opportunities possessed by no other portion of the Union.

That the impression exists that the ores of the South are more refractory and difficult of treatment than those of other fields is undoubtedly true, but that doubt is the creation of those Southern miners who, through their ignorance of the value of their sulphurets and their lack of knowledge of the source of the gold, have inaugurated failure after failure, which has given rise to the opinion that it was impossible to make gold-mining profitable in the South. 40 to 80 per cent. of the value of all the quartz mined throughout the district has gone into the dumps or tailings, and no enterprise can prosper under such conditions. The direct source of the great majority of the gold throughout Alabama, Georgia and the Carolinas is from decomposition of sulphurets.

Few properties contain the gold in a free state, and the veins carrying gold that will pay to work for the free gold alone to any great depth are indeed rare. It is true that occasionally gold is found imbedded in the quartz, but such cases are few. The "brown ore," or oxide of iron, that has come from the decomposition of the sulphurets is that which has been most sought, and in many instances has yielded large returns, but the amount of such ore is small compared with the great quantities of sulphurets in their native state, and especially so when water-level is reached. Usually a streak of brown ore is found upon the foot-wall side of the larger veins, and in some instances the vein matter is shattered and the oxide is found scattered all through it, while with depth the vein becomes more solid and less decomposed, and in consequence less free gold is found. But even near the surface there is much of the sulphurets unaltered, and it is not an uncommon thing to break pieces of float showing free gold as well as undecomposed pyrites. Being ignorant of the value of the sulphurets, the operators would sink to water-level and stope the ore to the surface, mill the brown ore and that portion of the vein that was decomposed and leave the rest lying on the dump or throw it into the bottom of

the stope; or, again, as was frequently the case, remove the decomposed ore and leave the solid portion of the vein standing. While thus working ore containing possibly 5 per cent. undecomposed sulphurets, worth from \$50.00 to \$300 per ton, the average 10-stamp mill was making a daily loss of \$45.00 to \$295, and the owners wondering why the mill returns did not compare with the assay value of the ores. No intelligent miner in the West for the past ten years at least has sustained such a loss, and through insufficient capital or ignorance alone of the Southern miner should he have done it, and not from a lack of pay ore.

There are a few mills throughout the South that in recent years have been properly equipped and managed, and in every instance they have been successful, but the majority have not been of that kind, and the majority have been signal failures. For years there has been no mystery about saving gold, nor should there be in connection with Southern ores. It is simply amalgamation of free gold and concentration of sulphurets. The sulphurets are easily treated by smelting or chlorination, and no question as to saving the gold by either of the methods exists, the former, however, being less satisfactory for the South, owing to the scarcity of lead throughout the district; and when shipments are made to smelters of the East or West the expenses of freight and treatment aggregate about \$25.00 a ton, and in concentrates of low value cuts a big hole in the profits. Chlorination by the Thies process is entirely satisfactory, as has been proven at the Haile mine in South Carolina, and by which the expense does not exceed \$3.50 per ton of concentrates. So far there have been no public chlorination works in the South, but a plant is now being erected in Charlotte, S. C., by Mr. Carnahan and associates that will no doubt be of great benefit to the gold interests, as the miner who has not the capital or desire to erect a chlorination plant at the mine can get his concentrates treated at small expense. There is also a plant in course of construction at Blacksburg, S. C., for the reduction of pyriteous ores, which materially enhances the value of concentrates, as by their process not only the gold, but the sulphur and iron, become a source of profit. In this connection is much to be regretted the blow that the Wilson bill contemplates giving another Southern infant industry.

That the gold-mining industry of the South is fast gaining ground there is no doubt, and no one familiar with gold-mining questions the value of the properties or the possibilities of making them pay. The class of men who are entering the field are just what is needed—practical miners, who know that the ores can be cheaply and profitably mined, and who will make successes of the failures of the past. New mines are being opened up and old ones cleaned out. Every issue of the MANUFACTURERS' RECORD announces the building of new mills, and in my opinion there will be more money invested in the Southern gold field within the next three years than the country has ever known, and in every instance where a mill is built by judicious, practical men success will surely follow. It is a vast field offering extraordinary inducements to practical men, which not only promises, but assures, success. No "bonanzas," no fortunes in a day, but a solid basis for safe, legitimate investments, with assurances of continuous dividends. HENRY V. MAXWELL.

Knoxville, Tenn.

A MOVEMENT is on foot in New Orleans to organize a young men's business league similar to the organizations in Memphis, Augusta and Little Rock. It is proposed to secure 1000 members who will pay annual dues of \$10.00 each, to be spent in advertising the advantages of the city, etc.

### Southern Sentiment on the Wilson Bill.

KNOXVILLE, TENN., January 8.

Editor Manufacturers' Record:

I am in full sympathy with you in the vigorous effort you are making for the South against the "Wilson bill," as should be every man who has the mining and manufacturing interests of the South at heart. The future prosperity of this section depends almost alone on the development of her natural resources. On an equal basis, with reasonable protection, she can hold her own against any portion of the world, as is fast being realized. It is a duty every citizen of the New South owes to his native or adopted home to demand for her that equal basis. Kill her coal, iron, lumber, marble, mica, pyrites and other material resources and you check her progress. Let me congratulate the MANUFACTURERS' RECORD on the masterly effort it is making for the building up of the South. HENRY V. MAXWELL.

### A Protest from Louisiana.

ST. MARTINVILLE, LA., January 10.

Editor Manufacturers' Record:

For answer to your query, "Will you erect a refinery?" I say yes, provided our sugar industry is not nipped in the bud and our people ruined by adverse legislation. For three years our farmers have been preparing their lands for cane culture and buying mules, carts and necessary tools of husbandry, knowing that we were to erect a refinery this year at this place. Of course if that bounty clause of the Wilson bill is passed or if we have no tariff, we shall certainly not erect the refinery. It would only be adding more paupers to the list. But if anything of that kind is done us by our own party, Louisiana will surely go republican. Already the cane carts in this county are decorated with McKinley flags. Should legislation be favorable I shall send you a list of all needed machinery for our refinery. K. MARTIN.

[NOTE.—Mr. Martin intended to erect a sugar mill of 600 barrels daily capacity.—ED.]

### Southern Tariff Views.

EDEX, ALA., January 11.

Editor Manufacturers' Record:

Surely there could be nothing more detrimental to the Southern States than the Wilson tariff legislation. How can it be understood that a Southern man representing Southern people could favor such a law. C. D. ALVERSON.

MATHEWAN, W. VA., January 12.

Editor Manufacturers' Record:

For several years I have been receiving an occasional copy of your magnificent weekly, but having several other lumber and industrial journals I got along without yours, but your fight against the iniquitous Wilson bill brings me to you with a subscription. Everything we have in West Virginia—coal, iron, wool, lumber, pottery and glass—will be ruined if this measure becomes a law, our railroads be wrecked and the wheels of progress be turned backwards. I am here in the mountains that were until recently the "lair" of the Hatfields and McCoy vendetta, with a large lumber industry on the "Ohio extension" of the Norfolk & Western Railroad, where large coal developments in the Pocahontas, Va., and Bramwell and Elkhorn region in West Virginia, and, in fact, all along the line of this great railroad coal fields and coke ovens are being opened, and many mills in the lumber industry being located. Both industries are paralyzed and are waiting the action of Congress on the Wilson bill. Democrats and republicans alike along the line of this road can see the "handwriting on the wall," and should the Wilson bill pass they know that it simply means ruin to their industries. You will serve your country and patrons well to keep up your fight. H. S. WHITE.

## PIG IRON.

## The Effect of the Wilson Bill on Manufacturers of It in Virginia and the South.

[Richmond Dispatch, January 9, 1894.]

The proposed duty of 22½ per cent. ad valorem on pig iron imported into the United States will enable English and other foreign irons to be imported into this country at a price that will practically exclude Southern irons from the Atlantic coast and New England trade, which are the principal markets that Virginia irons now have.

The value of a ton of English pig in England is about \$8.00  
To this add the duty of 22½ per cent. ad valorem..... 1.80  
The vessel freight from England to America, say from fifty cents to \$1.00, allowing the maximum cost..... 1.00

Making the English pig delivered at the Atlantic seaboard cost about \$10.80

It costs Southern and Virginia furnaces about \$3.00 a ton and over to ship their iron from their furnaces to New York or New England markets. If these furnaces are required to meet foreign competition in pig iron, after deducting the cost of shipping the iron to their trade, it would leave a balance of \$7.80 a ton which the iron would net at the furnace, less commission and other incidental and necessary expenses. Under these circumstances can Virginia furnaces remain in the market? I should say no.

## VALUE OF A FURNACE TO A COMMUNITY.

The consequences of stopping a furnace of 900 to 1000 tons capacity per week would be somewhat as follows: The freight receipts inward and outward amount to not less than \$15,000 to \$20,000 per month, which is about equal to the average revenue to a railroad derived from a city of 20,000 people. This gives one some idea of the enormous amount of business set in motion by a large furnace in operation. In addition to the direct loss to the railroad in the falling off of its business, the employees of the railroad and those dependent upon them would suffer corresponding hardships and losses. There would also be cut off in wages to furnace employees \$15,000 to \$16,000 per month. The farmers in the vicinity who sell their farm products, flour, bacon, corn, hay, potatoes, butter, eggs, chickens, fruits and live-stock, would lose a ready, profitable home market, and would soon be made to feel the hard times incident to stopping the furnace.

The coal miner would also have to stand his share of the burden, as it requires from 300 to 350 tons of coal per day to produce coke for such a furnace as named. This would cut off about \$10,000 monthly at the coal mines and result in preventing 150 to 200 miners from earning their daily bread.

Following in the track of depression and losses, our wholesale merchants at home would suffer a monthly loss of thousands of dollars of trade.

To present these results with more practical force we will work out the problem of one furnace and apply to the entire iron interest of Virginia and give the figures in gross covering a year:

The loss to railroad in freight, passenger fares and indirect services, \$20,000 per month..... \$240,000  
The loss to those dependent on railroad, \$1000 per month..... 12,000  
Employees of furnace, \$15,000 to \$16,000 per month..... 186,000  
To farmers in vicinity, \$3000 per month..... 36,000  
Coal miners, \$10,000 per month..... 120,000  
Wholesale merchants, say \$5000 per month..... 72,000  
Doctor fees, monthly, \$300..... 3,600

Total loss estimated for one year of.... \$669,600

to the people of Virginia by stopping one furnace. Apply these figures to all the furnaces in the State, amounting to some fifteen or eighteen, and taking the smaller number and multiplying it by \$669,600, and we have \$10,350,000 lost trade to the State of Virginia, with all the depression and sympathetic evils to be found in stagnant trade in other industries.

## PAINFUL FACTS.

I have a letter from the owner of one of the largest and most advantageously-located furnaces in Virginia—a man whose life has been spent in making pig iron in Virginia—wherein it is stated that if the Wilson bill be passed, reducing the duty on pig iron to 22½ per cent. ad valorem, even with additional reduction of the wages now being paid to laborers in the mines and furnaces, Virginia pig would cost \$1.50 per ton more than it could be sold for in competition with that of Great Britain.

These are the painful facts that must stare a thinking man in the face when he contemplates the effects of the Wilson tariff bill upon the great mining and iron industries of Virginia and the South.

In the face of such figures, which are not based upon fiction, it seems to me that Congress should feel the great responsibility of enacting any law which would make it possible for English ironmasters to supply the needs of this country with iron, and in doing so throw idle the mines and furnaces of Virginia and the South. These are the results which those engaged in the coal and iron industries can only see in the Wilson bill if passed. And yet a tax is levied on manufactured products which gives 35 to 45 per cent incidental protection to New England, which will be allowed to buy coal and iron from foreign countries with which to make her cheap wares to supply our home people, and in doing so shut up American mines and furnaces.

## IS IT BUSINESS?

Is this wisdom? Is this patriotic? Is it democratic? Is it in accordance with the Chicago platform? Is it common sense? Is it good business? In my humble opinion I should say no to all of these questions, and, in speaking "from a democratic standpoint," I think there is politics enough in a question of such practical force to make those who regard the future of the party pause and reconsider before it is too late.

M. ERSKINE MILLER.

## NOVA SCOTIA VS. THE VIRGINIAS.

## Some Comments on the Prospectus of the Dominion Coal Co.

NORFOLK CITY, VA., January 15.

Thomas P. Grady, Washington  
Bureau Manufacturers' Record:

I take the liberty of sending you a copy of a circular which was issued in Boston in February, 1893, for soliciting subscriptions for bonds and stock of the Dominion Coal Co., Limited. I was furnished with a copy a few days before going before the committee of ways and means in the interest of the coal trade of Newport News and Lambert's Point, and called the attention of that committee to this document, the result of which was that I was applied to in many directions for copies of the paper, which induced me to have a number printed, and, as I have some of these left, I take the liberty of sending you one with a few comments, being deeply interested, as I am, in the coal trade of the two Virginias.

We have here a mammoth coal combine with a capital of \$21,000,000. I would call attention to the fact that this company is organized under the laws of Nova Scotia, a foreign government. It has been formed to carry on the business of mining, selling and transporting bituminous coal in the county of Cape Breton, Nova Scotia; that it has leased the mines from the colonial government at twelve and a-half cents per ton royalty. It proposes to work the mines hereafter all the year round, instead of some six or seven months as heretofore; that there will be a consolidation of all the companies, thus lessening expenses. A railroad will be constructed of twenty-

seven miles to Louisburg, "a port open and easily accessible all winter." The circular estimates that coal could be put f. o. b. at Louisburg for about \$1.00 per ton, which is cheaper than at any port in the world. The report states that during the last five years the average profit has been forty cents per ton on the output, which is double that of the most profitable mine in the United States.

The president and chief engineer live in New England; the treasurer and the resident manager reside in Canada. Four of the nine directors are Canadians.

This great trust announces through its circular that "should the United States duty of seventy-five cents per ton be removed, it seems evident that this company will find a large market on the New England seaboard, for which its position at tidewater would enable it to compete on advantageous terms."

This great trust was formed by Mr. Henry M. Whitney, of Boston, a brother of the late Secretary of the Navy, who is president of the company, after the congressional elections in 1890 clearly demonstrated that the policy of protection was about to be abandoned by the American people. It would appear that influential New Englanders raised the larger portion of the capital and combined with influential Canadians, who leased the monopoly of the Cape Breton mines from the Crown for ninety-nine years. It was formed evidently for the purpose of driving the American coal, the product of American labor, out of the New England and other Atlantic markets.

The following is an analysis of the cost of bituminous coal at Boston, as shipped from Hampton Roads and Cape Breton ports:

## ANALYSIS-COST BITUMINOUS COAL AT BOSTON.

	U. S.	N. S.
Royalty, mining and loading railroad cars at mines.....	\$1.00	\$1.00
United States—average railway transportation from mines to seaboard, 350 miles at four mills per mile.....	1.40	
Nova Scotia—average railway transportation from mines to seaboard, twenty-three miles.....		.25
Water freight to Boston, average.....	.90	1.00
Present duty.....		.75
Cost at Boston, including duty.....	\$3.30	\$3.00
If coal is made free, deduct duty.....		.75
Cost of Nova Scotia coal at Boston duty off.....		\$2.25

N. B.—Boston is selected simply as a common point in New England, and as a large receiving port for coal.

It will be seen that the Nova Scotia coal can be sold at present, after paying duty, at \$3.00 alongside of the wharves at Boston. This is thirty cents cheaper than Hampton Roads coal can be sold there. It is claimed that Hampton Roads coal is at least forty cents per ton better than the average Nova Scotia coal, and that with the tariff on it is not likely that we will lose much of the New England trade, except where parties interested in this Dominion Coal Co., Limited, can control the contracts of corporations by their official positions on the directories.

If twenty-five cents, as proposed by some, is taken off the duty of bituminous coal, it would force the Hampton Roads coal to reduce its price some twenty cents to hold its own in the New England market. This reduction of price cannot be made without great sacrifice and hardship to all concerned.

The mine-owners now get their full royalty in Virginia and West Virginia, averaging about ten cents per ton, but with the decreased output they would, of course, receive less revenue. The workers in the mines are paid as low rates as any human beings can decently exist on. The wages at many of the mines are compromised after strikes. The operators, who lease the mines and work them, complain that the great competition in the markets—especially in the New England market—leaves them so small a profit that in many cases, without their having the benefit of

the trade of their company stores, there would be nothing in the business for them.

The Virginia railroads are now hauling coal at such a low rate per ton per mile that were it not for the large volume of business they could not haul coal 400 miles and carry the cars back the same distance, empty, without loss. As about three-fifths of the coal brought by the Virginia roads to Hampton Roads goes to the New England markets, if this amount were lost to them or greatly reduced the roads would be forced to charge higher rates on the remainder of the coal and other freight carried by their lines; thus this competition of Nova Scotia coal, by driving the Virginia coals out of the New England market, would result in raising the price of coal on the Virginia seaboard, as well as the rate of freight on agricultural and other products. The roads, having brought the coal to Hampton Roads, the cars are unloaded into vessels by stevedores, who get only fifteen cents an hour, and, if it were not for cheap colored labor at Newport News and Lambert's Point, the work could not now be done for this price.

Freights between Hampton Roads and Boston for this year have been down as low as sixty-five cents per ton, although the average all the year round is, as stated in the table above, ninety cents.

The vessel owners complain that there is nothing in this for a sailing vessel and very little profit for barges. Now, if the tariff is reduced twenty-five cents, I would like to know where the twenty-five cents is coming off, between the time the miner takes the coal from the ground to the time it arrives alongside at Boston?

The total abolition of the duty would be the total destruction of the Virginia trade in the New England market, which trade has decreased the price of bituminous coal over 30 per cent. in the last decade, the average being, alongside in Boston in 1882, \$4.90, and in 1892 \$3.34. The New England people are mistaken if they suppose this Nova Scotia competition is going to give them much cheaper coal, even with the total abolition of the tariff. The Nova Scotia trust only needs to reduce the price of coal in New England twenty-five cents to drive Virginia competition out. As only about one-third of the coal that goes from Hampton Roads to New England is used by the manufacturers, they would not save enough money to enable them to sell any of their goods at a sufficiently low rate to induce the retailer to alter his price to the people throughout the country, who would, therefore, receive no benefit from the destruction of the Virginia coal trade, as claimed by the chairman of the ways and means committee.

The perusal of this Dominion Coal Co. circular should raise in the minds of every member of Congress the question whether he should deprive the thousands of American citizens in the two Virginias directly and indirectly interested in this steam-coal trade of their means of supporting themselves and their families by reducing the tariff twenty-five cents on coal, and thereby giving a bounty to a rich foreign corporation with a capital of \$21,000,000, which, for every ton of coal it brings into New England to displace a ton of Virginia coal, pays twelve and a-half cents into the treasury of the British Crown.

WILLIAM LAMB.

## Against the Cigarette Tariff.

A Richmond dispatch states that the Richmond Tobacco Exchange will endeavor to organize all the tobacco interests in Virginia, West Virginia and North Carolina in opposition to the Wilson tariff bill as it relates to tobacco. A committee is to go to Washington to work against it. The exchange takes the ground that the change is a discrimination against the bright tobacco belt and will greatly injure these three States.

## RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department, on page 423.]

## The Terminal Reorganization.

Slowly but surely steps are being taken towards reorganizing the Richmond Terminal system as proposed by Drexel, Morgan & Co. Within the past week a judgment for \$17,813,845.55 in favor of Charles H. Coster and others has been filed against the Terminal in New York. Mr. Coster is one of the silent partners of Drexel, Morgan & Co., and this judgment will tend to force a foreclosure sale on the old 5 and 6 per cent. bonds issued by the system. Another significant point is that owners of the Memphis & Charleston securities deposited in favor of the Terminal reorganization committee have been requested to withdraw them, as the deposit of those securities has not been large enough to include a majority. This will exclude the Memphis & Charleston, also the Cincinnati Southern, which is practically owned by the Erlangers, from the new plan, and separate them from the rest of the lines. It has been intimated that the East Tennessee, Virginia & Georgia might be left out of the plan altogether.

The non-payment of interest guaranteed by Drexel, Morgan & Co. under the new plan to holders of Louisville Southern and other bonds, which fell due January 1, has caused considerable uneasiness lest the plan should fall through. The firm has ninety days from maturity in which this interest can be paid before legal proceedings can be taken to enforce payment, and it is generally believed that the interest checks will be made out before April 1, as under the plan of reorganization the underwriting syndicate becomes also liable with the Terminal in case of payment default. The report of the Richmond & Danville shows that it is earning a minimum of \$225,000 per month net, which is 5 per cent. annually on \$54,000,000 capitalization. In ordinary times it is believed this will increase to \$258,000 per month.

## Why English Investors Distrust Us.

As many of the English papers with reviews of the year 1893 have reached this country, one can obtain a fair idea of the bitter feeling towards "American rails" which prevades financiers on the other side of the water. The series of receiverships during the year, while of unusual length, might not have weakened confidence of investors so much had less mystery accompanied the operations of the companies. The general opinion seems to be that the British public has been deceived and that the true state of affairs has been covered up by those engineering the receiverships until stock held by themselves and friends had been unloaded in the market. The Erie, Reading and Atchison troubles all received scathing criticisms, but the latter most of all. Here is one paragraph.

"Slowly but surely the value of American securities is being undermined by the transparent schemes of inexperienced and reckless managers to retain control of properties in which they have no financial interest except the profits that accrue to them from control. There has probably never been in the country a more conspicuous case of irresponsible management than the Atchison Company now affords. Its most pronounced feature is a constant chatter to newspaper reporters and news agencies about the satisfactory condition of the property and the bright outlook for its future, while every financial officer of the company is busily engaged from daylight to darkness shinning around for money."

Other articles are equally severe, and, as may be imagined, their effect is anything but beneficial on the readers. As a result, other roads which are entirely solvent

have to suffer in the London market, and every dollar of decrease or increase in reports is closely noted, while more and more orders to sell stock are given the foreign brokers. Much of this distrust is doubtless without foundation, but it exists, and until it dies out, which may be a long time hence, we may expect to see "Americans" quoted over the water several points below their actual value. Even the dividend payers are regarded with suspicion, and if a dividend is declared, the question is raised whether it is from actual earnings or was borrowed. Under these circumstances the action of the Louisville & Nashville Railroad Co. in passing the January dividend should be favorably rather than unfavorably received, since it indicates that the directors intend to use the utmost prudence and economy, as befits the situation, rather than place themselves in a false light by an action which might be misconstrued as a deception.

## New Idea in Road Improvement.

The discussion of good roads in the State of Ohio has assumed a new phase by the attitude of the railway commission. That body argues that to improve all the principal highways of the State would cost \$400,000,000, and estimates that the average cost of transportation by horses or wagons over country roads, even if improved, is about twenty-five cents per ton-mile, as contrasted with about one-half cent per ton-mile for transportation by steam over railways. The members conclude, therefore, that it would be more economical and beneficial to extend electric roads along the highways for transporting freight and passengers, as but little grading would be required, and the cost would not be much more than that of ordinary road-building.

Here is an idea for the consideration of those interested in road improvement in the South to think over.

## An Important Decision.

Railroad companies generally will be interested in a decision recently handed down by the Supreme Court of Virginia in regard to the detention of freight cars by merchants and others to whom their contents are consigned. The special suit was the Norfolk & Western Railroad Co. against Adams, Clement & Co., of Roanoke. The opinion recites that such detention of cars was really of greater importance to the companies than the small charge of \$1.00 per day per car, as it would frequently seriously interfere with the traffic of such companies. The sum involved in this case was less than \$500, but the defendants in error are large lumbermen and do a great deal of shipping. The decision is a victory for the railroads of the State.

## Shipping Grain to New Orleans.

Another route by which grain and Western products are being diverted to the South for export, instead of the Eastern seaboard cities, is formed by a combination of the Houston, Central Arkansas & Northern and the Missouri Pacific. As already stated in the MANUFACTURERS' RECORD, the former line has now been consolidated with the Iron Mountain. By it shipments can be made from Missouri and nearby sections direct to New Orleans. The haul is much shorter than by way of Chicago. Already considerable quantities of wheat have gone to New Orleans for export by the new route.

## New Freight Route.

It is reported that the Clyde Steamship Co., Florida Central & Peninsular and Louisville & Nashville systems have arranged a freight route by which cotton and other goods from the Southwest will be shipped over these roads to Jacksonville, thence by sea to the North.

## Louisville &amp; Nashville Report.

The Louisville & Nashville directors have passed the semi-annual dividend usually declared at this time, although, according to the report of the last six months, the system earned about 2 1-10 per cent. on its capital and had a surplus January 1 of \$1,108,102. The directors state that a dividend was not declared because it is deemed best to maintain a surplus ample to operate and develop the several lines so as to secure all the business it is possible to acquire; also, because business conditions at present are such that the utmost economy and prudence should be exercised. The half-year's report shows gross earnings of \$9,761,073, a decrease of \$1,923,856 compared with 1892, and expenses of \$3,879,596, a decrease of \$631,726. After deducting interest and other fixed charges, \$1,028,846 is left, to which is added \$131,645 and \$29,545, interest and profit on investments and leased lines. The system was operated with 60 3-10 per cent. of the gross earnings.

## The Money Pledged.

A dispatch from Little Rock, Ark., announces that the city has secured \$75,000 in stock subscriptions for the Little Rock, Hot Springs & Texas Railway, and that the building of the line is assured, as \$50,000 has been raised by Hot Springs. Uriah Lott, of New York, who has agreed to build the road, is now in Little Rock, and it is understood that work is to begin at an early date. As already stated in the MANUFACTURERS' RECORD, the Little Rock, Hot Springs & Texas is to be completed first to Hot Springs and eventually to Paris, Texas. The Commercial League of Little Rock obtained the subscriptions from business men of that city.

## Another Texas Road.

Burkett & Murphy, the railroad contractors at Palestine, Texas, announce that they have secured financial aid and will build a railroad line from Palestine to Dallas, about 100 miles in length, passing through Anderson and Henderson counties. They state that right of way has been donated for most of the distance from Palestine to the Dallas county line. Mr. Burkett is a prominent railroad builder, and is considered worth from \$300,000 to \$500,000. At Dallas the new line would tap the Missouri, Kansas & Texas and Texas & Pacific, and at Palestine it would connect with the International & Great Northern, one of the Huntington lines.

## New Line to Birmingham.

A dispatch from Mobile, Ala., announces that the Mobile & Ohio has determined at last to carry out the project of building a branch of its system into Birmingham from a point in Bibb county, Ala. The extension will be about fifty miles long and give Birmingham a new short route to St. Louis. The connection will be made with the Montgomery & Tuscaloosa branch of the Mobile & Ohio, now being built. Besides reaching Birmingham, it will pass through Bessemer and Blocton, Ala. It is understood that Birmingham will be entered over what is known as the Birmingham Belt Line.

## The Report Denied.

Regarding the telegraphed reports that the Gulf, Colorado & Santa Fe was interested in building a road soon to be built from San Angelo to San Antonio, General Manager Yoakum, of the Santa Fe, writes to the MANUFACTURERS' RECORD that there is no probability of such a line being built in the near future.

## The Home-Seekers' Excursion.

A circular has been issued by the Cleveland, Cincinnati, Chicago & St. Louis Railway stating that this road will make a rate

of one fare for the round trip from all points on its line and over connecting lines to points in the South on the dates set for the "land-seekers' excursion." Heretofore one excursion of this nature has been run in the autumn, but up to this time the people of the North have not had such an opportunity of visiting the South in the winter at the low rates which are now made once each month for the next four months.

## Railroad Notes.

Two orders from Justice Jackson have just been filed in the United States Circuit Court at Montgomery, Ala. One of them makes R. Somers Hayes co-receiver of the Mobile & Girard, and the other makes him co-receiver of the Montgomery & Eufaula Railroad. The original order appointing him co-receiver with Mr. Comer, of the Central, did not extend to these two roads.

DAVID HEMPHILL, of Chester, S. C., has been appointed permanent receiver of the Chester & Lenoir narrow-gauge road.

C. A. MERRIAM, formerly general superintendent of the San Antonio & Aransas Pass, and later of the Monterey & Mexican Gulf Railroad, has accepted a position in charge of the extensive works of the Charleston Mining & Manufacturing Co. at Charleston, S. C.

THE Norfolk & Western has made a new departure in shipping cattle. The company has put on a special train which makes passenger time and is composed of patent cars.

MAJ. C. S. GADSDEN has been elected president of the Northeastern Railroad, vice A. F. Ravenel, deceased. Major Gadsden will also retain his present position as superintendent of the Charleston & Savannah Railroad, with which he has been connected ever since its construction.

W. T. ADAMS, of Corinth, Miss., has been appointed general manager of the Chattanooga Electric Railway Co.

THE East Tennessee, Virginia & Georgia Railway Co. has given out the contract for lining its four-mile tunnel in Elk Valley, Tenn., to M. J. Condon & Co., of Knoxville. The lining is of the wood, and the work will cost \$85,000.

STOCKHOLDERS of the Paris & Great Northern have elected W. J. Reinhart, president; S. J. Wright, vice-president, and Charles Griffith, secretary and treasurer.

JOHN H. REYNOLDS has been appointed receiver of the Rome (Ga.) Electric Railway Co. The road is said to be solvent, but dissension has arisen among the stockholders.

J. GATES, of the Louisville & Nashville, has been elected vice-president of the Traveling Passenger Association of the United States.

THE Illinois Central announces that it will make a one-fare rate for the round trip on account of the coming Mardi Gras at New Orleans. This rate will apply all over the lines of the Illinois Central, including that from Sioux City. It will be in effect from January 29 until February 4, inclusive. The tickets will be good for the return trip until February 28. All the competitors of the Illinois Central will meet the rate.

PRESIDENT PLANT, of the Savannah, Florida & Western, has purchased the Rogers locomotive which received a World's Fair award of merit. It weighs sixty-six and one-half tons, has 72 1/2-inch driving wheels and is a 10-wheel engine. It will be placed in service between Savannah and Jacksonville.

GEORGE T. TAYLOR will succeed James A. Larned, who has resigned his position as president of the New Orleans & Southern road.

BONDHOLDERS who have claims against the State of Arkansas and several railroads for which it issued bonds to the amount of

\$5,350,000 have organized to enforce payment of interest on which the railroads have defaulted. The Knickerbocker Trust Co. of New York is the depository of these bonds.

THE cars for the electric street railway to be built at New Berne, N. C., it is stated, will be of the storage-battery pattern, and no trolley wire will be used.

THE City Street Railway Co., of Houston, Texas, has elected O. M. Carter, president; H. F. McGregor, secretary; C. A. McKinney, treasurer, and F. Mundas, superintendent.

H. F. MCFARLAND has been appointed general freight agent of the Chesapeake, Ohio & Southwestern, with headquarters at Memphis, Tenn.

HOWARD MUNNKHUYSEN, of Baltimore; W. K. Schoeff, of Washington, and H. K. Gray, of Washington, have been elected president, vice-president and secretary, respectively, of the Belt Railway Co. of Washington.

THE Mercantile Trust & Safe Deposit Co. of Baltimore has begun an action for the appointment of a co-receiver of the Georgia Southern & Florida with W. B. Sparks, the present receiver. The case will be heard in Macon, Ga., January 22. Skipwith Wilmer, of Baltimore, one of the attorneys of the Georgia Southern bondholders, will be appointed receiver if the court decides another is necessary.

A NEW YORK dispatch states that R. D. Carpenter has resigned as commissioner of the Associated Railways of Virginia and the Carolinas, comprising the Richmond & Danville, the Atlantic Coast Line and the Seaboard Air Line. He will be succeeded by Mr. W. H. Fitzgerald, of Baltimore, who has been with the same system for a number of years.

It is stated that the Atlantic Coast Line will soon purchase four new passenger engines, and that the Richmond & Danville will want several engines for its Florida fast trains.

#### Two More Hotels.

Two more hotels are projected in Southern cities, which if built, will greatly improve the places where they are intended to be constructed. A company is being formed in Charleston, S. C., to carry out the plans of J. A. Wood, the New York architect who designed the famous Tampa Bay Hotel. It is proposed to utilize the block on Meeting street where the Charleston Hotel now stands and build a structure of brick and artificial stone, with steel girders, which will be fire-proof. The hotel is to contain 300 rooms, with a large veranda around the outside and an ornamental rotunda in the centre. Two towers each 160 feet high are to be located on the front corners, and the interior is to be finished in cypress and pine. The cost is estimated as between \$400,000 and \$500,000. Hon. D. H. Chamberlain, F. W. Wagener and W. M. Bird, all of Charleston, are among the capitalists interested.

Chicago people have made a proposition to the citizens of Fort Worth, Texas, to build a hotel to cost \$300,000, provided a site is donated in the centre of the city. They have submitted plans for a fire-proof building, 125 by 100 feet, to be built of brick and artificial stone, with steel pillars and girders. Robert McCart and B. B. Paddock are assisting to secure a site for the hotel and a committee is securing donations.

#### A Banking Association.

The banks of Lynchburg, Va., have formed an association for mutual benefit and the general advancement of banking interests. The following-named officers were elected for the next year: Charles M. Blackford, president; Wm. A. Carpenter, vice-president; Camillus Christian, secretary.

## FINANCIAL NEWS.

### Changes in Bank Officers.

The annual meetings of national and other banks held in the South since the first of the year have resulted in the re-election of former officers in most cases. In Knoxville, Tenn., not a change was made among the active officers of the several banking-houses. Where changes have been made they were principally cases of voluntary retirement, owing to age or ill health, and not the results of differences or disagreements.

The annual reports have been considered very satisfactory, and give strong evidence of the caution and conservatism that caused so few Southern banks to suspend during 1893.

Below will be found the principal changes of banking officers so far reported for 1894:

Alabama.—Berney National Bank, Birmingham—J. B. Cobbs, president; W. F. Aldrich, vice-president; W. P. G. Harding, cashier.  
Jefferson County Savings Bank, Birmingham—A. Godden, vice-president.  
Kentucky.—German National, Newport—E. C. Kemme, cashier.  
Second National, Louisville—John W. Green, president; G. S. Allison, vice-president; C. C. McCarthy, cashier.  
Bank of Louisville—M. C. Peter, president; T. L. Jefferson, vice-president.  
Tennessee.—Continental National, Memphis—C. F. M. Niles, president; J. C. Neely, vice-president.  
Holston National, Knoxville—H. S. Mizner, president.  
First National, Memphis—C. W. Schulte, president.  
Memphis National—G. W. MacRae, president; H. M. Neely, vice-president; T. J. Latham, cashier.  
First National, Nashville—H. W. Grantland, vice-president; W. F. Bang, cashier.  
Virginia.—Merchants' Bank, Danville—J. R. Jopling, president; F. X. Burton, vice-president.  
First National Bank, Buena Vista—Julius Graham, vice-president.  
National Exchange Bank, Roanoke—J. B. Andrews, vice-president.  
First National Bank, Newport News—W. A. Post, vice-president.  
Maryland.—Citizens' National Bank, Frederick—W. Irving Parsons, vice-president.  
Georgia.—People's National Bank, Americus—Bascom Myrick, president; W. C. Furlow, vice-president; John Windsor, cashier.  
Texas.—First National Bank, Beaumont—John N. Gilbert, president; John L. Keith, vice-president; W. S. Davidson, cashier.  
Lavaca County National Bank, Hallettsville—J. W. Bennett, president; C. A. Kessler, vice-president.  
Citizens' National Bank, San Angelo—S. E. Sterrett, president; G. B. Sherwood, vice-president; A. B. Sherwood, cashier.  
First National Bank, Cameron—John B. McLane, vice-president; T. F. Hardy, cashier.  
Gate City National Bank, Texarkana—W. W. Sanders, president; E. A. Dyer, vice-president; J. G. Kelso, cashier.  
First National Bank of Itasca—J. M. Coffin, vice-president.  
Citizens' National Bank, Kaufman—Andrew E. Carlisle, president; G. B. Taylor, vice-president.  
Florida.—National Bank of the State of Florida, Jacksonville—J. N. C. Stockton, president.  
First National Bank of Jacksonville—R. C. Cooley, cashier.  
Mississippi.—Merchants' Bank, Grenada—W. C. McLean, president.  
Louisiana.—First National Bank, Lake Charles—A. W. Perkins, president; L. Kaufman, vice-president.  
West Virginia.—Citizens' National Bank—C. H. Shattuck, president.

### New Financial Institutions.

Tacoma Building & Loan Association has been incorporated in Baltimore by William Knabe, James H. Parrish and others with \$500,000 capital.

H. C. Fisher, M. F. Cole and others are organizing a bank at Newnan, Ga., which is to have \$50,000 capital.

The Washington & Baltimore Loan Association has been incorporated at Baltimore by C. W. Hopkins and others with \$300,000 capital.

President C. M. Burns, of the Bank of Anson, advises the MANUFACTURERS' RECORD that it will open for business at Wadesboro, N. C., about February 1 with

\$50,000 capital. T. A. Marshall is to be cashier.

Charles E. Murwin and W. T. English are among the incorporators of the Bankers & Merchants' Fire Insurance Co., of Wheeling, W. Va., which is to have \$200,000 capital.

### More Dividend Payments.

The feature of the dividend payments reported to the MANUFACTURERS' RECORD this week has been the number declared by manufacturing plants, and especially cotton mills. As will be seen by the appended list four of the largest concerns in South and North Carolina have paid from 3 to 5 per cent. on earnings of the last six months. Knitting mills at Norfolk and yarn mills at Raleigh have also paid handsomely. As a sample of the success of carriage-making in the South, the Central Kentucky Carriage Co. pays its stockholders 6 per cent. Following is the list:

#### Industrial Dividends.

The Lowenberg Knitting Co., of Norfolk, Va., has declared a dividend of 5 per cent. on the operations of eight months.  
The Newberry (S. C.) Cotton Mill has earned a dividend of 4 per cent. during the last six months on \$250,000 capital.  
The Savannah Brewing Co. has declared a 3 per cent. dividend.  
The Greenwood (S. C.) Cotton Mills have paid to shareholders a semi-annual dividend of 3 per cent. for the last six months.  
The Lexington (Ky.) Plumbing Co. has declared a semi-annual dividend of 6 per cent.  
The Raleigh (N. C.) Cotton Mills have declared a semi-annual dividend of 5 per cent.  
The Raleigh Hosiery Yarn Mills have also declared a 5 per cent. semi-annual dividend.  
The Central Kentucky Carriage Co., of Danville, Ky., has declared an annual dividend of 7 per cent.  
The Durham (N. C.) Cotton Mills have declared a semi-annual dividend of 5 per cent.

#### Miscellaneous Dividends.

Home Fire Insurance Co., Baltimore, 5 per cent. semi-annual.  
German Fire Insurance Co., Baltimore, 5 per cent. semi-annual.  
First National Bank, Salisbury, N. C., 5 per cent. semi-annual.  
Farmers and Traders' Bank, Knoxville, Tenn., 3 per cent.  
Farmers' Bank, Georgetown, Ky., 3 per cent. semi-annual.  
Merchants and Farmers' Bank, Portsmouth, Va., 6 per cent.  
People's Bank, Portsmouth, Va., 3 per cent.  
Lexington (Ky.) Gas Co., 3 per cent. semi-annual.  
Miners and Merchants' Bank, Aurora, Mo., 5 per cent. semi-annual.  
Bank of Aurora, Mo., 5 per cent. semi-annual.  
Carter Dry Goods Co., Louisville, Ky., 4 per cent. semi-annual.  
Abilene (Texas) National Bank, 100 per cent. (special).  
Planters' Supply Co., Lynchburg, Va., 6 per cent. (first year's business).  
First National Bank, Durham, N. C., 3 per cent. semi-annual.  
South Chattahoochee Savings Bank, 4 per cent. semi-annual.  
Baltimore (Md.) Warehouse Co., 3 per cent. semi-annual.  
Baltimore & Fredericktown Turnpike Co., 1½ per cent.  
First National Bank, Statesville, N. C., 4 per cent. semi-annual.  
Shelbyville (Ky.) Trust Co., 3½ per cent. semi-annual.  
Farmers and Traders' Bank, Shelbyville, Ky., 2 per cent. quarterly.  
Harford National Bank, Belair, Md., 7 per cent. semi-annual.  
Polk County National Bank, Bartow, Fla., 11 per cent. annual.  
Bank of Guntersville, Ala., 4 per cent.  
First National Bank, Cameron, Texas, 6 per cent.  
Second National Bank, Richmond, Ky., 9 per cent. annual.  
Richmond (Ky.) National Bank, 4 per cent. semi-annual.  
Farmers' National Bank, Richmond, Ky., 4 per cent. semi-annual.  
Merchants' Bank, Grenada, Miss., 8 per cent. annual.  
Newnan (Ga.) National Bank, 3 per cent. semi-annual.  
First National Bank, Newnan, Ga., 3 per cent. semi-annual.  
Planters and Merchants' Bank, Ozark, Ala., 10 per cent. annual.  
Citizens' Bank, Little Rock, Ark., 4 per cent. semi-annual.  
First National Bank, Beaumont, Texas, 5 per cent. semi-annual.

### New Bond and Stock Issues.

The City National Bank of Knoxville, Tenn., has increased its capital from \$100,000 to \$200,000.

It is stated that the Peninsular Land, Transportation & Manufacturing Co., of Tavares, Fla., will obtain control of the Bank of Tavares and increase its capital to \$100,000.

The town of Stanford, Ky., has sold \$290,000 worth of 6 per cent. bonds at a total premium of \$35.85.

The company owning the Newberry (N. C.) Cotton Mill, it is reported, will increase its capital from \$250,000 to \$400,000.

The Pensacola (Fla.) Home and Savings Association has increased its capital from \$500,000 to \$600,000. R. M. Cary, Jr., has been elected secretary, and W. K. Hyer, Jr., treasurer.

The city of Denison, Texas, will issue 5 per cent. bonds, to be placed on the market about February 1. They are to extend twenty years, with a five-year redemption option. Address J. D. Vocom, mayor.

The city council of Columbia, Tenn., has decided to issue \$25,000 in 30-year 5 per cent. bonds to pay floating debts. G. T. Hughes may be addressed.

The Chevy Chase Land Co., of Washington, has filed a deed of trust on its property to secure a proposed bond issue of \$1,000,000, to be used for improvements. The company owns large tracts of real estate in the suburbs.

### Failures and Suspensions.

R. P. Howell, ex-cashier of the Bank of Wayne, at Goldsboro, N. C., has made an assignment, with liabilities estimated at \$45,000.

James T. Holt has been appointed receiver of the business of Charles C. Holt, book dealer at Macon, Ga. Assets are estimated at \$30,000 and liabilities at \$45,000.

The Virginia Paper Co., of Richmond, has made an assignment to R. H. Siegar and J. E. McKenney. Liabilities are estimated at \$18,000.

The Mingo Mountain Coal & Coke Co., of Kentucky, has gone into the hands of a receiver. C. M. Woodbury has been appointed.

The Pollock Co., of Montgomery, Ala., dry-goods dealers, have assigned to W. K. Pelzer and Sigmund Roman, with assets of \$150,000. Liabilities are reported to be \$225,000.

The Chatham Furniture Co., of Savannah, Ga., has made an assignment to E. F. Lovell. Its assets, \$41,000, are reported to be in excess of the liabilities.

### A Real Estate Object-Lesson.

The success of the Statesville (N. C.) Development Co. is a practical lesson of what can be done in Southern real estate. This company has paid to its stockholders 20 per cent. dividends in three years, and still has sold but a small portion of the real estate it holds in the vicinity of Statesville.

### Financial Notes.

The fifty-seventh bound volume of the Commercial and Financial Chronicle has just been issued, embracing the weekly numbers from July to December, 1893, inclusive. The Chronicle gives practical information about stocks, bonds, money, quotations, railroads, etc., that is valuable to every private investor, as well as to bankers, brokers, corporations, merchants and others.

THE Equitable Building and Loan Association of Augusta, Ga., has cleared \$56,642.80 in three years, an average of 27 per cent. yearly on its capital.

THE State comptroller estimates that Tennessee will have a surplus over all interest and other payments on January 1, 1895, of nearly \$500,000. It is proposed to use this in building the proposed penitentiary, instead of issuing bonds.

## PHOSPHATES.

## Not the Port Royal Fertilizer Co.

The article republished in the last issue of the MANUFACTURERS' RECORD from a Port Royal (S. C.) paper regarding the appointment of a receiver for the Port Royal Fertilizer Co. was entirely incorrect, the Carolina paper having doubtless made the mistake of referring to the Port Royal Fertilizer Co. instead of the Royal Fertilizer Co., which has been in litigation in Charleston. Messrs. Comer, Hull & Co., of Savannah, write the MANUFACTURERS' RECORD that the Port Royal Fertilizer Co. does not owe a dollar on earth, and is as solvent as any concern can possibly be.

## Phosphate Markets.

OFFICE MANUFACTURERS' RECORD,  
BALTIMORE, January 18.

The volume of trade in phosphates has been quite good during the past week, and values show a hardening tendency. Advices from points of production in South Carolina and Florida are to the effect that holders are firm in their views as to price, while the offerings of rock are light. The output in Florida is well sold up, and for near future delivery it is hard to place orders. The receipts of rock during the week were as follows: Schooners Isabella Gill, from Ashepoo, S. C., with 650 tons; Charles E. Schmidt, with 800 tons, from Charleston, and Senator Sullivan, from Tampa, Fla., with 550 tons. The charters reported were the schooners E. C. Middleton and B. F. Lee, Ashley river to Baltimore; also the Susan B. Ray, Ashley river to Richmond, Va. The market at the close is firm as follows: South Carolina rock \$5.00 for Charleston, \$4.75 for Ashley river and \$5.00 to \$5.25 for Ashepoo, S. C., all f. o. b. Florida rock is firm at \$5.25 to \$5.50 for 60 per cent. river pebble, \$5.50 to \$6.00 for 65 per cent. and \$6.25 to \$6.50 for 70 per cent., all f. o. b. Charlotte Harbor or Tampa.

## FERTILIZER INGREDIENTS.

The general market is quiet and business somewhat light in volume, with prices barely maintained. There is a fair inquiry, with stocks generally light. Nitrate of soda is quiet and steady, with a good demand. Liverpool advices quote the market quiet and unchanged at £9 10s. per ton, less 2½ per cent. for good quality in double bags. Sulphate of ammonia has declined, and is nominally quoted at about £13 13s. 6d. to £13 15s. per ton, less 2½ per cent. for good gray 24 to 25 per cent. in double bags f. o. b.

The following table represents the prices current at this date:

Sulphate of ammonia.....	\$ 3 40@	\$3 75
Nitrate of soda.....	1 95@	2 10
Hooft meal.....	2 35@	—
Blood.....	2 60@	—
Azotine (beef).....	2 60@	2 70
Azotine (pork).....	2 60@	2 70
Tankage (concentrated).....	2 40@	—
Tankage (9 and 20).....	\$2 35 and 10 cts.	—
Tankage (7 and 30).....	20 00@	21 00
Fish (dry).....	27 00@	28 00
Fish (acid).....	18 00@	20 00

CHARLESTON, January 15.

The phosphate market here remains quiet, with few sales for the week, though numerous inquiries were made. The land mining continues to increase, and activity in development indicates brighter times. Prices are about the same, at \$4.50 crude, \$5.00 to \$5.25 hot-air-dried and \$7.50 ground rock, all f. o. b. Charleston. The Rillie S. Derby cleared for Philadelphia with 602 tons. In port and loading are the E. C. Middleton, Mary Landford and Anna T. Ebner. The export shipments from September 1, 1893, to January 13, 1894, were 39 916 tons crude and 300 tons ground rock. Mr. J. R. Pringle and T. M. Mordecai have been appointed joint receivers for the Royal Fertilizer Co. They will proceed to effect arrangements for filling the contracts outstanding and disposing of the stock of fertilizers on hand. The new

and extensive acid plant, with pyrites burners, etc., of the Ashepoo Phosphate Co. is about completed. In the face of financial stringency and business depression, which sent hundreds of enterprises to the wall last fall, this energetic company decided to refit and double its old acid plant, and replace its sulphur burners with pyrites furnaces, thus putting in the latest improvements for the cheap manufacture of fertilizers, and enabling it to compete in any market with the lowest prices. By August, after working steadily during the summer, its plant was nearly ready for use, but the disastrous cyclone of that month prostrated every new building and spread ruin on every side. With indomitable energy it cleared up the wreck, and its new and splendid works remain a monument to its energy, industry and business capacity. The shipments of fertilizers continues heavy, being far in advance of shipments for same date last season. The sale of several large lots of blood is noted for this week, and a rise in price for this material is expected.

## Phosphate and Fertilizer Notes.

THE port of Fernandina has enjoyed a good general business during the past year and the record of shipments of phosphate is larger than 1892. The record of the trade of this port, as furnished the MANUFACTURERS' RECORD by the Fernandina Terminal Co., shows an increased business in nearly all commodities of trade. The primary industry of the State is largely represented, and the shipments of phosphate for the year show the remarkable facilities for handling this product. The total shipments of phosphate rock for the year 1893 aggregated 126,800 tons, distributed among the following countries: England, 13,033 tons; Scotland, 5353 tons; Ireland, 1908 tons; Austria, 2700 tons; Holland, 10,319 tons; Germany, 60,195 tons; France, 12,078 tons; Spain, 4077 tons; Italy, 3708 tons; Denmark, 10,790 tons; and Sweden, 1943 tons; also domestic shipments amounting to 696 tons. The clearances were made by the following companies and firms: Cie des Phosphate de France, 54,511 tons; Dunnellon Phosphate Co., 24,815 tons; Anglo-Continental Guano Works, 17,167 tons; Pebble Phosphate Co., 5189 tons; Illinois Phosphate Co., 5983 tons; B. Arentz & Co., 5256 tons; N. B. Borden & Co., 4246 tons; Albion Mining & Manufacturing Co., 3010 tons; J. M. Lang & Co., 2380 tons; Camp Phosphate Co., 1700 tons; Marion Phosphate Co., 1522 tons; and Wells Phosphate Co., 1021 tons, making the total 126,800 tons. The total shipments for 1892 were 124,950 tons and the estimated shipments for the current year are 150,000 tons. For January the estimated shipments are placed at \$500 tons. The schooner Wyman finished discharging a cargo of 1000 tons of soft coal on the 8th inst., and other vessels are in passage for this port with additional cargoes of coal. The lumber shipments are increasing since the holidays and the prospects for an increase in shipments for the current year are very encouraging.

THE regular meeting of the Board of Trade at Jacksonville, Fla., on Friday morning last, after adjournment, resolved itself into a supplementary caucus on the phosphate situation. An informal discussion of the question followed, and it was generally agreed by those present that co-operation was necessary, and that steps should be taken to secure the adjustment of railroad rates and the adoption of home analysis on all foreign shipments. A sub-committee to formulate a plan of action was appointed, consisting of Messrs. Little, Robertson and Stockton, with instructions to report at 4 P. M. The sub-committee reported accordingly at that hour, and recommended that a convention of the phosphate miners be called, under the auspices

of the Jacksonville Board of Trade, for the purpose of effecting an organization among the phosphate miners. It was agreed that the president be asked to call a meeting of the Board of Trade as soon as possible, in order to consider the report of the committee and take action thereon; also to name the date for calling a convention of phosphate men.

THE Pebble Phosphate Miners' Association held their first annual meeting at Bartow, Fla., on the 3d inst. The principal business of the meeting was the election of officers for the ensuing year. The following gentlemen were elected: W. T. Lay, Terracea Phosphate Co., president; Geo. A. Le Maistre, Pharr Phosphate Co., vice-president; J. Northcott, Fort Meade Phosphate Co., treasurer and secretary. It was ordered that the formation of an executive committee be left for appointment by the president. The prospects for the ensuing year were considered bright, the present prices being steady and the demand for pebble phosphate increasing, both for the home and foreign markets. The pebble miners have already seen the wisdom of their move in deciding to sell only f. o. b. cars or vessels, and were unanimous in declaring that if the foreigners want the pebble they must buy it here.

THE stockholders of the Louisville (Ky.) Globe Fertilizer Works held a meeting in that city on the 9th inst. The affairs of the company were reported in a flourishing condition, and its officers were complimented on the good showing made in the face of the present financial depression. It was voted to increase the capital stock from \$50,000 to \$150,000 in order that increasing business might be handled to better advantage. This stock is limited to the old stockholders and will not be put upon the market. The officers elected were I. I. Harbison, president; George Broadus, vice-president, and Alexander McLennan, secretary and treasurer.

RIVER phosphate miners in South Carolina are at work repairing damages caused by the storm in August last. The Sea Island Chemical Co.'s works are being repaired, and the Beaufort Phosphate Co.'s dredge will be brought over from Savannah this week and put to work.

JUDGE IZLAR, of Charleston, S. C., has filed an order with the clerk of the court decreeing that a receiver shall be appointed in the now famous Royal Fertilizer Co.'s case.

## Gold-Mining Prospects in Georgia.

AURARIA, GA., January 10.

Editor Manufacturers' Record:

I am carefully laying the foundations for extensive gold-mining operations in this section. I find this territory is very extensive and immensely rich in gold-bearing veins. I have recently had several Western miners here, and they expressed themselves as surprised to find such a rich territory and such little excitement over it. There is now very little activity in gold-mining here, but I am confident that we will soon see great activity in gold-mining. All of our mining has been open surface mining; we have had practically no underground mining. We are where we have to go deep from now on, as most of our surface mines have been worked to water-level. Another trouble is, we have a great deal of sulphurets in our ore, so much so that some of our richest mines are not profitable to work. I am now carefully studying the best plan to overcome the troubles in sulphurets ores.

I find that Georgia gold mines have a black eye almost everywhere, and I cannot understand the cause. There is an idea among mining men that our mines are no good and will not pay, whereas, if anyone interested in our section will only investigate, they will see that this is a mistake.

E. W. COLEMAN.

## Chance to Get a \$3,000,000 Plant.

A possible chance to secure a great manufacturing plant is offered some Southern city if it will go to work on the matter at once.

The Johnstown (Pa.) Steel Co., of which J. A. Moxham is president, is considering the idea of erecting a steel-rail mill capable of turning out rails ninety feet long and over. It is to be built in a section which offers the most advantages for making steel, and if a site is selected elsewhere than Johnstown, the rolling mills now owned by the company in that city may be abandoned and the whole plant, which is valued at over \$3,000,000, located where the steel mill is to be built.

## Business Before Politics.

From the last issue of the MANUFACTURERS' RECORD, a strictly non-partisan industrial publication, we take an extract from a letter by Mr. A. Jeffers, of Norfolk, Va., on the recent election, wherein Senator Martin defeated Fitzhugh Lee. It is remarkable from the simple fact that it is all true. There seems to be a new deal going the rounds of the new South. The industrial era is upon us, and sentiment is giving way to business, theory is giving way to practice, and the old and young men of the South have quit brooding over the past and are looking to the future. They have been inspired by the spirit of progress, and they are now going to put into office new men who will work for new ideas and new measures.—Velasco (Texas) World.

## The "Southern States" Magazine.

Leading railroad officers, representing about 30,000 miles of Southern roads, discuss "The South and Immigration" in the January issue of the *Southern States* magazine, and tell of the promising outlook for a great Southward movement of well-to-do Northern and Western farmers. Nearly every road reports a large increase in the enquiries received about the opportunities afforded by the South, and there are many reports that the tide of immigration is turning to the South in a way that would scarcely have been deemed possible a few years ago. This great movement is commencing just at the right time, for, as shown by an article on "An Economic Change in Southern Farming," the agricultural interests of the South are nearer on a cash basis than since the war. In this article it is shown how Southern farmers have gradually changed from the system of raising all cotton on credit and buying their foodstuffs to a cash basis and producing at home their corn and bacon, thus saving to the South the millions of dollars that have heretofore annually gone West for food supplies for man and beast. The January issue of the *Southern States* continues the publication of letters from Northern and Western farmers who have settled in the South, giving their views, based on their own experiences, as to the advantages offered by the South for farmers. These letters are attracting much attention, and their publication is doing great good in convincing Western farmers who have never been South of the attractions of this section. Under special departments introduced in this issue the *Southern States* covers everything of interest pertaining to real estate in the entire South, reporting all important sales of properties and giving the views of leading agents as to the real-estate outlook in different Southern cities, and a summary of all important matters for the month that relate to the progress of this section. Every man interested in the South, or every man who would like to know about the South, should see a copy of this *Southern States* magazine. It is published by the Manufacturers' Record Publishing Co., of Baltimore, which will send a sample copy upon receipt of fifteen cents in stamps.

## COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

## Cottonseed Rubber.

Mr. C. B. Warrand, of Savannah, who wrote about the manufacture of rubber from cottonseed oil in the MANUFACTURERS' RECORD some months ago, writes now as follows on the same subject:

"The Elastic Product Co. has turned its whole establishment in only partly oxidizing the cottonseed oil and making varnish out of it. As I wrote in the article about cottonseed-oil rubber, the rubber trust bought the secret from an English inventor some six years ago, and its works steadily make its own cottonseed-oil-rubber product at a cost of about seven cents per pound. The varnish made by the Elastic Company sells well and is as good as linseed-oil varnish. I know the secret how to make the rubber from cottonseed oil through my own researches, but it is of no value in the United States, as the rubber trust is the only purchaser of this kind of product, and the only patentable feature is an apparatus which has been patented in the United States. The whole process is very simple, and if I was assured of the sale of the product I could establish a plant for the manufacture here and keep the process secret, or, if desired to manufacture it in Europe, I would sell the secret."

## The Markets for Cottonseed Products.

NEW ORLEANS, January 15.

The New Orleans cottonseed-product market for the past week has been somewhat firmer, with a slight advance in both meal and oil. The advance in meal prices is due directly to the demand now springing up for cottonseed meal for fertilizer, and the slight advance in oil is caused by a somewhat better demand from abroad for refined. We quote cottonseed oil at twenty-seven and a-half to twenty-nine cents loose, basis New Orleans. In barrels the price is the same, owing to the fact that the oil has to be shipped for consumption, and buyers as a rule prefer to handle the oil when available in tank cars. There being no change in the foreign markets for cake or meal, we quote these the same as last week—that is, \$22.25 to \$22.75 per long ton f. o. b. steamer here; ex cars here at depot, jobbing \$21.00 per ton of 2000 pounds; linters dull at A, three and three-quarters to four cents; B, three and a-quarter to three and a-half cents; C, two and a-half to three cents, according to style and staple; soap stock, one to one and one-eighth cents; foots, one and a-half to one and three-quarter cents; ashes, \$17.00 to \$18.00; none offering.

JAMES RAINEY & Co.

ROTTERDAM, December 30.

The market for cottonseed oil has been very quiet during the past week, and almost no business has been done. The butterine manufacturers are never inclined to transact much business the last days of the year, and because the owners of oil were not inclined to sell their goods at very low prices, business has been very slow. It is likely that business will be more active in January. The weather is cold now, and good quantities of oil are mixed. This week about 5000 barrels have arrived, and several thousand barrels are on the way. The quotation for strictly choice oil is about thirty-three to thirty-two guilders, but oil of second quality is to be obtained at lower prices. It is difficult to say which price could be obtained now, because the buyers will not purchase this last week of the year unless they can get the oil at very cheap price. For a parcel of oil of good second quality twenty-nine guilders delivered has been offered. For well-known

brands, i. e., "Union," of the American Cotton Oil Co., somewhat better price can be obtained, but oil of strictly choice quality is scarce, and owners think to get better prices after January 1. The demand for butterine remains very unsatisfactory, and a better and more active demand is expected in the new year. America is reporting that oil of strictly choice quality, choice butter oil, is not salable at better prices than about thirty-four cents f. o. b. New York. This price is equal to twenty-six and a-half guilders delivered terms here. As written, for good second qualities twenty-nine guilders delivered here is to be obtained; therefore the Rotterdam value remains more than 10 per cent. above American prices. It is to be expected that we shall have a better market, with firmer prices, in January next.

G. W. SANCHES.

[NOTE.—The price in guilders per 100 kilos multiplied by 1.43 will give the price in cents per gallons.—ED.]

## Cottonseed-Oil Notes.

THE cottonseed-oil mill at Barnwell, S. C., has done, it is said, a very profitable business this season, so much so that the company will place additional machinery and increase the plant from a 20 to a 60-ton mill. This concern was first chartered as the Barnwell Oil & Fertilizer Co., but was partially destroyed by fire. Subsequently Mr. Van Winkle, of Atlanta, organized a new company and has made a success of the oil business.

THE exports of cottonseed oil from the port of New Orleans during the month of December, 1893, were as follows: Belgium, 5000 gallons; France, 153,000 gallons; Germany, 127,500 gallons; Holland, 542,500 gallons, and England, 10,000 gallons—total, 838,000 gallons, valued at \$431,450.

SWIFT and Armour are arranging to feed 3000 head of cattle in connection with the Consumers' Oil Mill at Fort Worth, Texas. Four hundred head of the stock arrived last week.

## A Favorable "Straw."

An officer of the Clyde Steamship Co. says: "Our advices from agents in the South show a gradual improvement in the condition of business, the inevitable result of empty shelves at all important trade centres. The resumption of the movement to reorganize the Richmond Terminal system will give a greater impetus, so that the outlook all around is better than a month ago."

## Editor Manufacturers' Record:

Phosphorus and sulphur in pig iron can readily be removed by treating liquid iron with caustic soda, which aids to break up the combination as a flux; then, under pressure, with care inject gasoline 74° into the melted iron. Carbon and hydrogen at the point of combustion will separate, carbon combining with the iron, making steel, whilst hydrogen has formed phosphureted hydrogen and sulphureted hydrogen gas, which passes off through a small clay pipe. I applied for a patent, but it was rejected. I tried it on a small scale. What I claim is, at the point of combustion the hydrogen and carbon separate. No other process is like it. I hope some one will try it on a large scale. I will be glad to give particulars.

CHEMIST.

THE Free Press is the name of a new evening paper at New Orleans which announces that it is to be democratic in politics. It will be published at 6 o'clock and contain the latest market reports and news. William Henderson is president of the publishing company.

THE employees of the Alberton (Md.) Cotton Mills held a meeting on January 16 and passed resolutions declaring that the Wilson tariff bill will decrease employment and wages and increase importations of manufactured goods.

## TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department, on pages 422 and 423.]

## To Complete the Pearl Mill at Durham.

The directors and stockholders of the Pearl Cotton Mills, of Durham, N. C., held their first annual meeting last week, and it was decided to push the unfinished mill to completion at an early day. The capital stock was increased from \$100,000 to \$175,000, and this additional sum is assured of full subscriptions at once. It is expected that the plant will be in operation by the spring. The following board of directors was elected: J. M. Odell, B. N. Duke, W. H. Branson, Dr. J. C. Brown and George W. Watts, and the officers are George W. Watts, president; B. N. Duke, vice-president, and W. H. Branson, secretary and treasurer. Mr. B. L. Duke, who recently failed, was largely interested in this company.

## Meeting of the Statesville Cotton Mill Co.

The stockholders of the Statesville Cotton Mill Co. held a meeting on the 8th inst. This company is engaged in building a new mill. Mr. Wm. Wallace, president, presented his report of progress, stating that work had been pushed rapidly. The main building, together with engine and boiler-room and six tenement-houses, have been completed. Mr. T. D. Miller, secretary and treasurer, also presented a favorable report, showing that the buildings and lands had been paid for, and all but about 2 per cent. of the stockholders' dues received. Mr. D. A. Tompkins, of Charlotte, is the company's engineer, and the equipment of the mill is under his charge. The outfit of machinery, including an electric plant for lighting, has been ordered and will soon commence to arrive. Seventy-five looms and 3000 spindles will be in position by April 1, and the mill will start shortly after.

## Southern Textile Notes.

THE stockholders of the Durham Cotton Manufacturing Co., of Durham, N. C., held their annual meeting last week, and the officers' reports were submitted. The greatest satisfaction at the management of affairs was expressed by those present, especially as the company declared a dividend of 5 per cent. for the past six months, making 12 per cent. for the year. The following board of directors was elected: J. M. Odell, J. A. Odell, W. R. Odell, W. H. Branson and J. S. Carr, and the officers are J. A. Odell, president; J. S. Carr, vice-president; W. H. Branson, secretary and treasurer. The company's plant is equipped with nearly 12,000 spindles and 244 looms, and its product is fine brown sheeting and chambrays.

It is said that the Charlotte (N. C.) Cotton Mills will not declare a dividend for the past year, but instead will expend its accumulated profits on improvements.

THE Odell Manufacturing Co., of Concord, N. C., has made a most excellent showing in its business for the past year. The stockholders held their annual meeting last week and a dividend of 4 per cent. was declared for the past six months, which makes 8 per cent. for the year. Mr. J. M. Odell was re-elected president, and W. R. Odell, secretary and treasurer.

THE annual meeting of the stockholders in the Henderson Cotton Mills, at Henderson, Ky., was held last week and a large majority of the stock was represented. The president, Mr. James E. Rankin, submitted his report, which, considering the hard times, was as good, if not better, than was expected. The plant did not decrease wages or working hours at any time. The usual January dividend of 5 per cent. was declared. The old board of directors was

elected, as follows: James E. Rankin, P. J. Marrs, John H. Barret, M. M. Merritt, R. C. Soaper, Wm. F. Draper and A. G. Cumnock. The company's capital stock is \$400,000 and its mill is equipped with 26,000 spindles and 615 looms, in charge of Superintendent Robert L. Cumnock.

THE Highland Park Manufacturing Co., of Charlotte, N. C., held a meeting of stockholders last week, and the following officers were elected for the year: Vinton Laddell, president; J. S. Spencer, vice-president, and the directors, W. E. Halt, J. S. Spencer, R. H. Jordan, Fred Oliver, P. D. Walker and J. W. Wadsworth. This company has a 500-loom weaving mill.

THE Coosa Manufacturing Co. has put its mill in operation again after a stoppage of several weeks for repairs and overhauling. This plant is at Piedmont, Ala., and it operates nearly 10,000 spindles. Jacob Barlow, president.

THE cotton mill of Messrs. Embury, Son & Young at Burcham Mills, Ala., seven miles from Florence, was entirely destroyed by fire last week, causing a loss estimated at from \$20,000 to \$25,000. The output of the plant was principally yarn, and its equipment was of very modern type, consisting of 2500 spindles and thirty looms. Insurance for nearly \$11,000 was held on the property.

THE Lowenberg Knitting Co., of Norfolk, Va., with mill at Berkley, held its annual meeting of stockholders last week. The business of the past eight months, for which time the plant has been in operation, was found to warrant a dividend of 5 per cent., which was accordingly declared. This is a very good result, and reflects credit upon those in charge.

THE Mooresville Cotton Mill Co., of Mooresville, N. C., which is to erect a plant, held its annual stockholders' meeting on the 8th inst., and the old officers and board of directors were re-elected. The question of increasing the capital stock sufficiently to pay for adding a weaving department was discussed, but no definite conclusion was arrived at. J. E. Scherrill is president, and J. C. Goodman, secretary.

THE new cotton mill to be built at Bath, S. C., noted in the last issue of the MANUFACTURERS' RECORD, will be commenced in the near future. The company has been organized as the Aiken Manufacturing Co. to transact a general manufacturing, spinning, bleaching and dyeing business in cotton. Messrs. H. M. Dibble and F. B. Henderson, of Aiken, S. C.; John G. Evans and Thomas Barrett, Jr., and Charles Estes, of Augusta, Ga., are the incorporators. The capital stock is placed at \$400,000.

THE stockholders of the new Erwin Cotton Mills, now building at Durham, N. C., held their first annual meeting last week, and the reports submitted were voted entirely satisfactory. The following officers were elected: B. N. Duke, president; George W. Watts, vice-president; W. A. Erwin, secretary and treasurer. The officers, together with J. B. Warren and W. T. O'Brien, are the first board of directors.

MR. HENRY RUSHTON has added several new machines to his knitting mill at New Berne, N. C., so that its capacity will be about doubled, and in the future will produce finer grades of hosiery than heretofore.

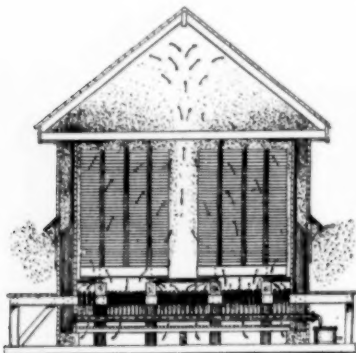
MR. J. J. BARNES, of Bowling Green, Ky., who has been traveling for the Maxwell (Ky.) Woolen Mills, has resigned his position and purchased a half-interest in the Bowling Green Knitting Mill. Mr. A. G. Rowe is the owner of the other half-interest. The plant is at present equipped with ten machines, and is turning out hosiery.

THE Raleigh (N. C.) Cotton Mills, manufacturing soft hosiery yarns, has declared a semi-annual dividend of 5 per cent.

## MECHANICAL.

## Advantage and Economy of Dry-Kilns.

It is now pretty well established that no lumbering plant is complete without some artificial means of drying lumber to prevent its blueing and staining, rendering it salable at the highest prices, as well as



End sectional view of kiln.

reducing its weight, thus saving in freight bills. The latter item is an important one, and has been figured out as follows: "A mill cutting 20,000 feet per day of Southern yellow pine ships it without drying to some point having a 30-cent freight rate. The lumber would weigh 4500 pounds per thousand feet and the freight on each day's run would be \$270. The same lumber dried would not weigh exceeding 3500 pounds to the thousand feet (and sap lumber would be much below that), and at the same freight rate would reduce the freight on a day's run to \$210 or less, a saving of \$60.00 per day in freight alone. Then the lumber, kiln-dried, would be worth at least \$3.00 per thousand in any market more than if it was either green or air-dried, making another item of \$60.00 per day over what it would be without a lumber drier, or in all a saving of \$120 per day for a mill of that small capacity."

A knowledge of these facts has fostered the invention of all kinds of devices for artificially drying lumber, and has brought into existence many dry-kilns. The accompanying illustration shows one, the "Reliance," the inventor of which is a mechanical engineer of skill and genius, who has built and operated woodworking plants, and having had extensive experience with all the best systems of drying lumber heretofore used, designed the "Reliance" kiln, the object sought for, and which, it is claimed, was obtained, being to produce a kiln in which the heat once generated is retained, and also retain sufficient moisture in the kiln to keep the surface of the lumber soft and moist under a high temperature until the moisture is extracted from the interior of the lumber. It is claimed by the makers that "at this point a part of the air will become fully saturated, and by its difference in weight or gravity becomes automatically separated from that which is only partially saturated with moisture and is discharged. By this means the room is kept sufficiently damp at all times to insure the lumber being dried soft without warping or checking; also acting as a safeguard against fire and causes a great saving of heat, as, if yellow-pine lumber is subject to a current of dry, hot air the surface of the lumber becomes so dry that the pores of the wood is sealed by the rosin before the moisture in the interior can escape, causing the lumber to warp, check and case-harden, and lengthens the time required to dry it, while if hardwood is subjected to a hot, dry current the density of the material prevents moisture from escaping from the interior before the surface is dried, and unless there is sufficient moisture retained in the kiln to prevent the sur-

face drying before the interior is dry, the result will be ruined lumber." Another object had in view was to avoid all complication and intricate parts and have a kiln so simple that it could be operated by the cheapest labor and not require any attention beyond furnishing steam to it.

How well the inventor has succeeded in accomplishing the undertaking may be judged by the fact that the standard size

room of this kiln, 17x100 feet, is said to dry 20,000 feet of green Southern pine boards each twenty-four hours, and with very small boiler-power, leaving the lumber clean and bright and with much less checking than if air dried.

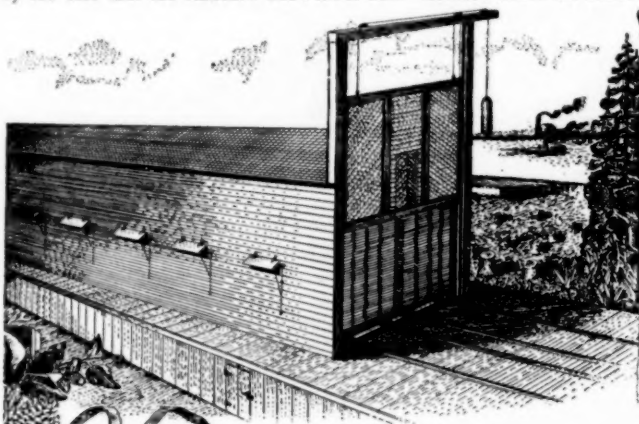
The construction and operation of the "Reliance" kiln is given as follows: "In a room, for which the company furnishes plans, are trucks containing the

each side of kilnroom, are deflectors and funnel-shaped openings for the purpose of receiving the air which has become fully saturated with moisture, and protect it from the upward current. The openings are connected with vertical ducts, leading downward, for the purpose of discharging the surplus moisture. At their lower ends are openings, with regulators, for the purpose of maintaining the proper degree of

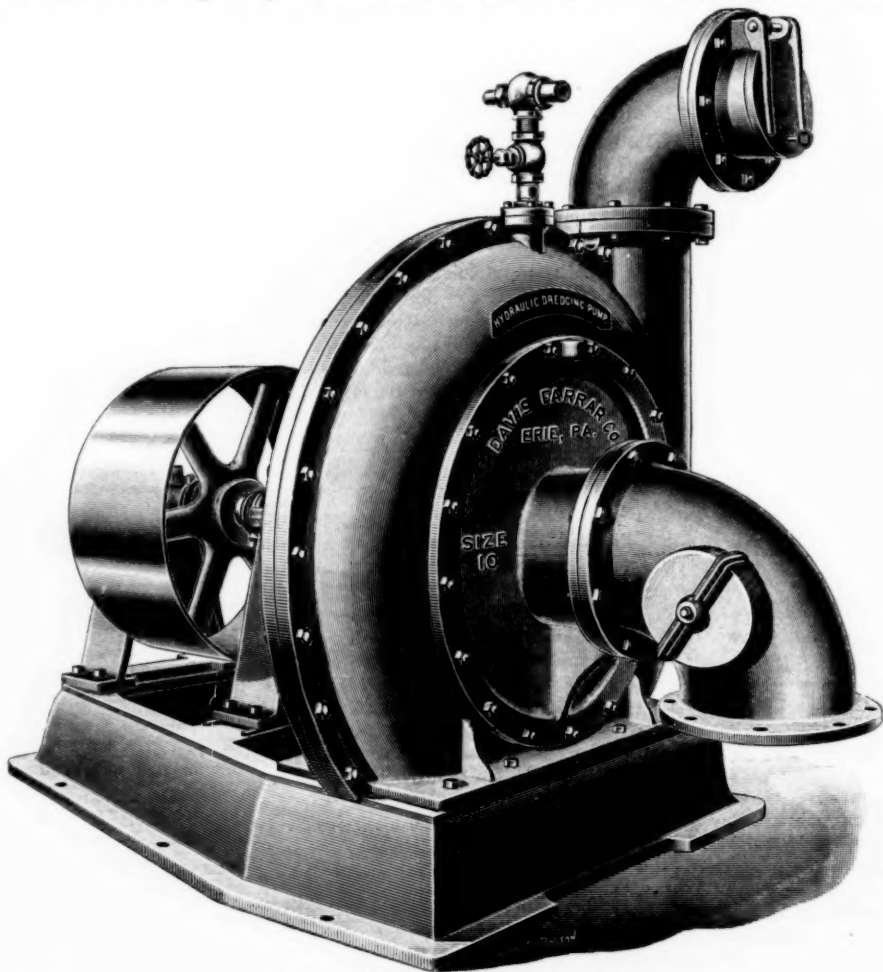
above the material until it becomes fully saturated with moisture, when, owing to its difference in weight or gravity, and the novel construction of the 'Reliance' dry-kiln, it is automatically separated from the partially-saturated air and discharged through the vertical ducts and openings on the sides into the atmosphere without loss of heat, as the heated air will not follow it downward; being lighter, it ascends, while the saturated cooler air and moisture descends same as rain from the clouds. It will thus be seen that the material being dried must give off sufficient moisture for the heated air in the kiln to become fully saturated before the kiln discharges any moisture. By this means the desired amount of moisture is at all times automatically regulated, keeping the outer surface of material moist until the centre is dry, preventing the pores of the material from becoming sealed by the sap or rosin, which would result in checking and warping. It is now conceded by all familiar with the subject that to dry lumber economically, successfully and rapidly, the air must be heated to the highest degree that live steam will heat it, as heat is the agent which vaporizes the water from the material being dried, and the action increases in proportion to the increase of temperature in kiln, but to dry lumber successfully without injury in a high temperature, it is necessary that suitable means be provided for keeping it moist throughout the process of drying."

Any further particulars desired can be had from the manufacturers, the Reliance Lumber & Manufacturing Co., 210 East Lexington street, Baltimore, Md.

THE RELIANCE DRY-KILN.



THE RELIANCE DRY-KILN.



THE "ERIE" HYDRAULIC DREDGING PUMP.

lumber to be dried. Sufficient steam pipes are placed in the room, beneath the trucks, to produce the proper temperature in the room, the pipes being arranged for perfect drainage and to prevent injury from unequal expansion. An automatic steam trap is placed at the low end to remove all water of condensation, suitable means being provided for air to enter sufficient for the drying process, which amount is auto-

moisture and density in the kiln. Lumber being placed in the kiln, steam is admitted into the steam pipes, and at once heated air commences to ascend slowly through the lumber, absorbing moisture in its ascent. Both air and moisture will continue to ascend, the drier portion of the heated air seeking the highest point in the room. Neither heat or moisture escaping, this continues uninterruptedly and collects

## The "Erie" Hydraulic Dredging Pump.

The "Erie" hydraulic dredging pump, illustrated in this issue, is claimed by the makers "to be better made, much heavier, more efficient, and to last longer and to possess more new features than is found in any other." In this pump the end thrust is avoided. By removing the suction disc (the work of a few minutes) the interior of

the pump can be examined and a new piston and shaft inserted without taking the pump shell from frame. These pumps are used for dredging sand, gravel, mud, etc., and have been found to meet every requirement, the manufacturer says. Pumps with capacities of from sixty to 500 yards material per hour can be furnished promptly with or without engines and boilers. For circulars and additional information address the makers, the Davis-Farrar Co., Erie, Pa.

#### Gypsy Windlasses.

Fig. 1 of the "Providence" ratchet gypsy windlass shows one of the various styles of gypsy windlasses made by the American Ship Windlass Co., of Providence, R. I. This style of windlass is very cheap in price, is of first-class material and workmanship, is a very desirable

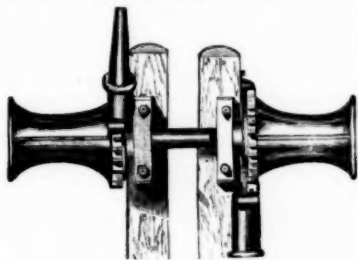


FIG. 1.

machine for small boats, and large numbers of them are sold every week by this company. They are kept in stock, from the smallest to the largest sizes, so they can be shipped in any quantity on the same day on which orders are received.

Fig. 2 shows the "Providence" ratchet gypsy windlass, with the addition of pump-brake attachment, which gives this



FIG. 2.

style of windlass double the speed of the simple ratchet gypsy windlass. All sizes of this style of windlass are kept in stock, and machines can be shipped the same day that orders are received. This windlass is made with iron bits if desired.

The "Providence" friction gypsy pump-brake windlass, shown in Fig. 3, is claimed to be the finest gypsy windlass

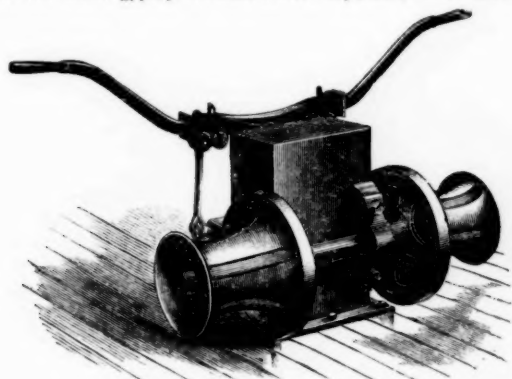


FIG. 3.

manufactured in the country. It is noiseless in its operation, and works without any lost motion. It also has a patent friction clamp, which is said to be superior to anything else made. This clamp has a false shoe which bears on the wheel and prevents the toggle from wearing a groove in the rim of the wheel, as is the case

where the toggle bears against the surface of the wheel. Iron bits are furnished with this style of windlass if desired. These windlasses can usually be shipped in twenty-four hours after receipt of order.

All the above styles of gypsy windlasses are made to handle chains from one-quarter inch up to one and one-eighth inch.

Those requiring such windlasses should send to the American Ship Windlass Co. for circulars and prices.

#### Improved Boilers.

[Textile World.]

"Your textile mills won't buy anything but the old-fashioned, plain tubular boiler," said a well known boiler-maker to the writer a short time ago, and the reason for it was given in his next remark: "For they are so hide-bound to ancient ideas that they will keep right on throwing their money away by using an old machine or boiler, rather than adopt one that is modern and an established improvement, simply because the fact of its being an improvement necessitates its being something their grandfathers did not use."

It must be acknowledged that he was right in a measure, but there is another reason for this, that is, the additional cost of the improvement. They are very slow to adopt anything which calls for any price above that known as the lowest, which, by the way, is not always the cheapest.

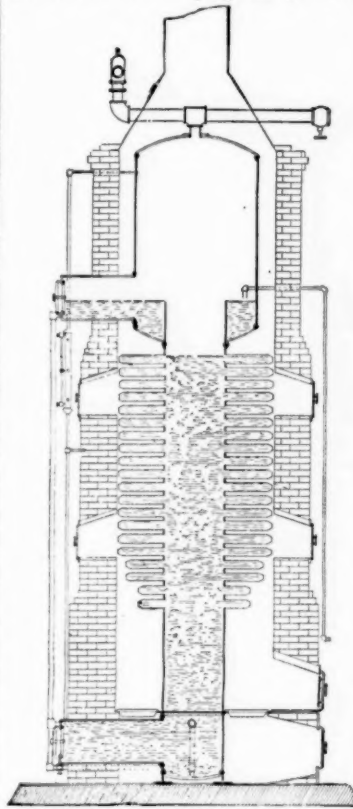
There is no denying that a water-tube boiler possesses many advantages which should recommend it to the trade at large. Economy is one of these, and there is no gainsaying that some of the water-tube boilers on the market today are a veritable gold mine to their owners, in comparison with some they had in place of them. With this fact proven time and again, there is no good reason why they should not be adopted.

Why is it that some of the mills in the country running wholly by steam can manufacture goods cheaper than others which have partly water-power? Simply because those who are obliged to run by steam see that everything about their plant is of the most improved pattern and giving the greatest economy, while, on the other hand, in a plant run partly by water, the owner thinks that anything will do to help out the water-power, and not infrequently this idea causes his partial steam plant to cost him more than it would to run wholly by steam, providing it was on the improved plan.

Another prominent feature of the water-tube boiler is immunity from explosion, as it is practically impossible to explode one, and when one takes into consideration the number of explosions occurring every year, this is no small factor. These, it would seem, would be enough to secure its adoption anywhere, but, alas, a water-tube

and flood an engine," which in a measure offsets the claim of extra safety, as it transfers the danger of a wrecked plant from the boiler to the engine, and while the latter would probably cause less loss of life, it would be practically the same as regards loss of money.

"If I could secure a boiler having the advantages and lacking the disadvantages of a 'water-tube' I would be glad to buy some," seems to be the sentiment; this shows a desire to be progressive, and the



AN IMPROVED BOILER.

endeavor to fill this requirement has led to the invention of the "C. P. Adams" boiler.

An examination of the cut herewith will show where the claims for superiority lie.

It has long been conceded that one of the quickest and cheapest ways to raise steam was to use a boiler made of a shell and auxiliary tubes projecting from it. This gives an exceedingly large heating surface, and has led to the adoption of boilers of the "porcupine" type, but the objection has always been that the tubes

on top of the porcupine shell, which made lifting of the water practically impossible, and secured dry, if not superheated, steam.

In order to obviate the trouble of having the tubes fill with sediment, he caused the main shell to be extended some several inches into the dome, and the water fed into the pocket thus formed, which caused the sediment to be deposited there, instead of in the tubes, and as this pocket is practically cool in comparison to some other portions of the boiler, the sediment remains in mud form instead of baking on.

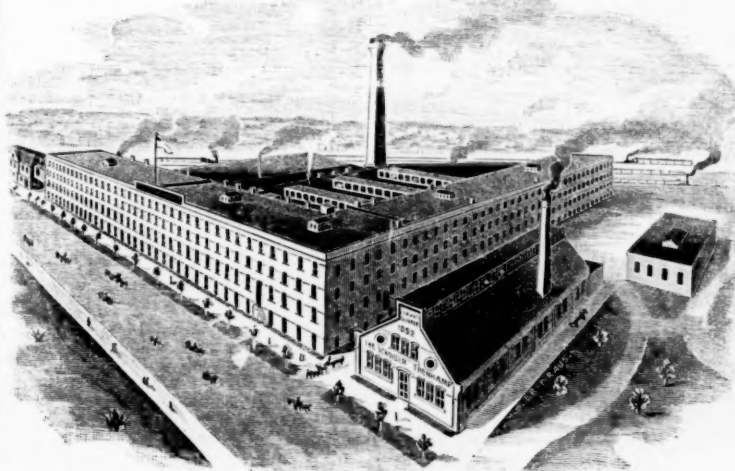
Another improvement consists in having two water legs, one at the top of this pocket and the other at the extreme bottom of the shell, with manholes in each, thus giving ample opportunity to clean the boiler thoroughly.

What might be called the crowning feature of the whole scheme is that the simplicity of the construction admits of its being placed on the market at an exceedingly low price.

In other words, the "Adams" boiler secures dry steam, immunity from explosions and great economy at a price which places it within the reach of all steam users. Anyone interested in obtaining anything in this line would do well to communicate with C. P. Adams, "The Cuyahoga," Cleveland, Ohio.

#### Where Reliable Stoves Are Made.

The extent of the business which the Schneider & Trenkamp Co., of Cleveland, Ohio, receives is indicated by the size of its factory, which we illustrate in this issue. Its gasoline stoves and other appliances have a wide and favorable reputation, and are rightly termed the "Reliable." They combine the best features of this class of cookers and heaters with the latest improvements. This company constructs all sizes of gas ranges, heaters, etc., and makes a specialty of its heat generators. The company employs only expert labor, and makes every effort to keep up with the times. The public appreciation of its efforts has made the past a banner year, and has also stimulated it to further improvements and beneficial changes, so as to maintain the "Reliable" as a leader among the vapor stoves of today. Nothing has been spared in remodeling the entire line, and the company does not hesitate to say that its principles of construction in both the single generator and "Reliable" process stoves are correct and thoroughly reliable. In points of finish the "Reliable" line for 1894 will, it claims, stand unexcelled. An



WORKS OF THE SCHNEIDER &amp; TRENKAMP CO., CLEVELAND, OHIO.

are very apt to fill up with sediment and burn off, causing delay.

Mr. Adams had listened for years to objections of this kind while selling agent for one of the most noted boilers of this type, so he set about to remedy the difficulties, and his boiler is the result.

As one of the objections was damp steam, owing to small steam storage space, he caused a large steam dome to be placed

unqualified guarantee is given with every stove. Among the numerous improvements made for the coming season is that all "Reliable Junior" stoves will be made with a lay-down tank. There will be no extra charge for this convenience, although this latest improvement is a decided safeguard against any accidents which formerly might have occurred with the old-style stationary tank stove.



while the purchaser was seeing what can be done with the mills. Advantageous arrangement can be made with experienced party thoroughly conversant with the business. Satisfactory reasons for selling and full information can be obtained by addressing the company.

THE American Hoist & Derrick Co., with headquarters at St. Paul, Minn., and having branches at Chicago and Cincinnati, announces the removal of its Chicago branch from 48 South Canal street to 54 to 60 South Canal street, fourth floor, where the company has enlarged facilities for carrying more stock and greater accommodations to its Eastern and Southern trade. They occupy the fourth floor of the building known as Machinery Hall, being the six-story building occupied exclusively by machinery houses, such as the American Hoist & Derrick Co., Manning, Maxwell & Moore, Berlin Machine Works, American Tube & Iron Co., Reeves Pulley Co., New York Safety Steam-Power Co., Copeland & Bacon and others. The American Hoist & Derrick Co. reports prospects for spring business to be good, and that indication with it are that the period of depression is practically over.

# CONSTRUCTION DEPARTMENT.

**WE PUBLISH**, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

\* Means machinery is wanted, particulars of which will be found under the head of "Machinery Wanted."

\*\* In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

## ALABAMA.

**Brewton-Canning Factory.**—The new canning company noted some weeks ago has now determined upon erecting a plant of 8000 cans per day, and will have it completed in about sixty days. Dr. B. H. Crumpton can give information.

**Bridgeport-Stove Works.**—The proposed organization of a new company to operate Lowman Bros.' stove works, noted in the last issue of the MANUFACTURERS' RECORD, has proven successful. E. H. Lowman has been elected president of the new company; B. J. Lowman, vice-president, and C. Douglas, secretary and treasurer, and these officers, together with T. R. Patterson, R. B. Patton, Virgil Boulden and J. M. Bender, form the first board of directors. The new concern has placed its capital stock at \$25,000, and will operate under the title of the Bridgeport Stove Works.

**Emory-Saw Mill.**—Albert D. Smith will rebuild his saw mill, lately destroyed by fire.

**Gurley-Lumber and Cedarware Mills.**—The Alabama Lumber & Manufacturing Co.'s lumber and cedarware plant has been sold at sheriff's sale to A. R. Nininger and M. Craven for \$11,000 cash. The plant is estimated as worth \$25,000, and the purchasers will organize the Nininger Craven Co. to operate it.

**Mobile-Machinery Works.**—McMillan Bros., of Savannah, Ga., and Fayetteville, N. C., noted in the last issue of the MANUFACTURERS' RECORD as to erect a plant in Mobile, will manufacture turpentine stills. Business will be commenced on a modest plan, with prospects of early enlargements. R. W. Southerland and C. E. Pearce are local managers.

**Munford-Gold Mines.**—A very rich gold deposit has been discovered in Talladega county, on the property of E. W. Wyatt and brother, who are not at present financially situated for developing. Capt. M. H. Hansard is interested.

**Opelika-Iron and Wood Works.**—The Opelika Iron Works and the Opelika Wood Works have consolidated and will be managed by A. M. Bagby and J. B. Bennett. The plant will be enlarged and employment given to 100 hands.

**Opelika-Knitting Mill.**—Geo. A. Lyon writes us that the owners of the Opelika Knitting Mill say it will be rebuilt.

**Opelika-Cotton Mill.**—Geo. A. Lyon informs the DAILY BULLETIN that a stock company is trying to raise sufficient funds for the erection of a cotton mill.

**Ramer-Canning Factory.**—M. A. Thomas is endeavoring to form a company to erect a canning factory.

**Round Mountain-Iron Furnace.**—A report from Cedar Bluff, Ala., states that a Mr. Collier, of Chattanooga, Tenn., has leased the Round Mountain furnace, the property of the Elliott Pig Iron Co. It is said he will repair it and put it in blast.

## ARKANSAS.

**Fordyce-Nut-lock Company.**—Patrick J. Conley, Edward E. Poole, Algernon S. Holderness, Jno. D. Dunn and William N. Alexander have incorporated the Fordyce Nut Lock Co. The capital stock is \$100,000, of which \$10,000 has been subscribed.

**Fort Smith-Abstract Company.**—The Lyman-Sherlock Abstract Co. has been reorganized with a capital stock of \$5000. T. I. Greenstreet is president; S. H. Sherlock, vice-president; G. H. Lyman, secretary and treasurer.

**Helena-Canning Factory.**—The Helena Canning Co. has been organized and will at once erect a factory for canning vegetables. L. Lucy, Henry Laurens, W. A. Short, James A. Tappan and others are interested.

**Little Rock-Paint Mill.**—G. W. Lake, H. B. High and William Kimball, all of Kansas City, Mo., will locate in Little Rock and under the name of the Lake Roofing Co. will engage in the manufacture of fire-proof paint. Mr. Lake is now in Little Rock.

**Little Rock-Hoop Factory and Saw Mill.**—A. Schneider, of Beebe, and R. B. Sadler will erect a barrel-hoop factory at once. Ground has been purchased and the building will be built as rapidly as possible. The machinery will include a sixty horse-power boiler and engine, a large saw mill and fifteen special machines for turning the hoops. Over forty hands will be employed.

**Pine Bluff-Furniture Factory.**—The facts in the proposed furniture factory noted in the last issue of the MANUFACTURERS' RECORD are that Pine Bluff capitalists have lately purchased the Beck & Bramford plant at Union City, Tenn., and will remove the same to their city. The new company will be capitalized at \$25,000, paid up. E. B. Bloom, secretary of the Young Men's Business League, can be addressed for further particulars.

**Smackover-Lumber Mills.**—The Globe Lumber Co. has been incorporated for the purpose of operating lumber mills, with a capital stock of \$30,000. The general office of the company is in Camden, Ark., and P. C. Blain is president; J. F. Miles, vice-president; Walter P. Ritchie, secretary and treasurer.

**Texarkana-Sewerage System.**—The city councils of Texarkana, Ark., and Texarkana, Texas, have formally accepted a proposition for the construction of the sewerage system lately noted. Franchise is granted to W. H. Ward, of Little Rock, and associates for twenty-five years, the city reserving the right to purchase the system after ten years. For further particulars address the mayor or Mr. Ward.

## FLORIDA.

**Daytona-Fibre Factory, etc.**—A fibre factory will be erected, as stated in the last issue of the MANUFACTURERS' RECORD, and work on it will commence at once. The Florida Fibre Co. will operate the plant, employing about fifty hands and consuming from twenty to forty tons of saw palmetto daily. It is intended to add a brush mill and mattress-making when advisable.

**Green Cove Spring-Bottling Works.**—R. E. Norman and N. B. Ivey are equipping bottling works, full outfit of machinery having been purchased.

**Madison-Water Works.**—The citizens will hold an election on February 6 to determine upon bonding the city for \$16,000 for the purpose of building water works. The mayor can give information.

**St. Augustine-Brick Works.**—F. A. Manse writes from Seabrook (no postoffice) that he has established brick works on the eastern coast of Florida south of St. Augustine. The plant's capacity is 12,000 daily, and he states that tile machines and repress will be put in soon.

**Tavares-Street Improvements.**—The city council has ordered an election to be held in March for bonding the town for \$4500 for street improvements. The mayor can give information.

**Tavares-Cigar Factory.**—The capital stock of the El Bonito Cigar Co. will be increased and the additional stock will be taken by the reorganized Peninsula Land, Transportation & Manufacturing Co., thus giving it control of the plant. A new building will be erected and cigar-making engaged in on a large scale.

**Tavares-Electric Plant, Ice Factory, Box Factory, etc.**—The Peninsula Land, Transportation & Manufacturing Co. has provided in a trust deed for the erection of an electric plant and a 50 ton ice factory, and proposes erecting a box and crate factory to employ 100 men.

**Tavares-Land Improvements.**—The old Peninsula Land, Transportation & Manufacturing Co. has been entirely reorganized, and will proceed to carry out its proposed land improvements and industrial projects. Alex. St. Clair Abrams, of Tavares, is president, and Jno. C. Soley, of Boston, Mass., treasurer. Jas. H. Mellen, of Worcester, Mass.; D. G. Ambler, of Jacksonville; Warren C. Spencer, of Boston, and others are interested. A trust deed for \$500,000 has been executed by the company, with the American Loan & Trust Co. of Boston as trustee.

## GEORGIA.

**Atlanta-Publishing.**—Thomas E. Watson, of Thomson, Ga., is organizing a \$100,000 company to publish a populist newspaper in Atlanta.

**Atlanta-Glass Works.**—James Rogers, F. D. Bloodworth, J. W. English and J. R. Gay have petitioned for the incorporation of the Southern Glass Co. for the purpose of manufacturing and

selling all kinds of glassware. The capital stock is \$15,000.

**Atlanta-Machinery Works.**—The Blount Stave & Machine Co. has been incorporated to manufacture and sell machinery for the manufacture of hogsheds, pipes, barrels, etc. The incorporators are Adna C. Conn, J. W. Moore, W. A. Rousch, J. N. Moore, Ebber Blodgett, E. E. Bates and R. O. Randall, and the capital stock is \$100,000.

**Augusta-Cemetery Company.**—The Oak Ridge Cemetery Co. has been incorporated with a capital stock of \$40,000 by Colden Rhind, Wm. H. Harrison, Jr., Hugh H. Alexander and others.

**Augusta-Pottery.**—A gentleman from Canada has been investigating the kaolin deposits in the vicinity of Augusta with a view of establishing a pottery. The secretary of the Young Men's Business League can give information.

**Dahlonega-Gold Mine.**—Samuel Smith and E. E. Crison have leased the Murray gold mine and will develop same.

**Demorest-Asbestos Mine.**—A company is mining asbestos near Demorest, as reported in our last issue. It is known as the Sall Mountain Asbestos Co., and T. W. Hicks, who is general manager, can be addressed at Sautee, Ga. A \$15,000 plant is in course of erection, and shipments will commence about May 1.

**Savannah-Machine Shops.**—An official of the Florida Central & Peninsula Railroad is reported to have said that the company's new shops will be built in Savannah, and that work of erection will commence shortly.

**Toccoa-Lumber Company.**—E. P. Simpson, D. J. Simpson and J. A. Burgess will organize the Simpson Lumber Co. with a capital stock of \$20,000.

## KENTUCKY.

**Ashland-Furnace, Iron Works, etc.**—The blast furnace of the Norton Iron Works was put into operation on the 10th inst. After a shut-down of six months for repairs. The puddling departments will resume in a few days and together with the nail mills, now in operation, the entire plant will be running for the first time in six years. About 600 men will be employed.

**Covington-Wharf-boat Company.**—L. T. Anderson, George A. Brooks and E. H. Clark have incorporated the Pittsburg & New Orleans Wharf-boat Co. for the purpose of operating wharf-boats, etc. The capital stock is placed at \$5000.

**Lexington-Steam Bakery.**—J. Q. Adams and associates contemplate establishing a steam bakery.

**Lexington-Carriage Works.**—Jacob Krauss, manufacturer of carriages, is having plans prepared for a new plant which he will erect at a cost of \$25,000. The new building will be four stories high, 60x52 feet in size.

**Louisville-Capital Increased.**—The Globe Fertilizing Co. has increased its capital stock to \$150,000.

**Sadleville-Flour Mill.**—The new company, lately noted as proposed, has been fully organized with a capital stock of \$10,000 and will erect a flour mill. T. J. Burgess is president; W. W. Alcock, vice-president; R. E. Lee, secretary, and R. Fields, treasurer.

## LOUISIANA.

**Baton Rouge-Canning Factory.**—Efforts for establishing a canning factory are being made.

**New Orleans-Publishing.**—The Free Press Publishing Co. has been organized for the purpose of publishing an evening newspaper. The directors are Charles Hernandez, John C. Wickliffe, Hugh McElroy, Frank A. Daniels and William Anderson.

**New Orleans-Sugar Cultivation, etc.**—The Oakley Planting Co., Limited, has been incorporated for the purpose of cultivating sugar-cane, etc., and the capital is \$100,000. Andrew Hero, Jr., is president; William S. Hero, secretary and treasurer, and Samuel M. Malhot, manager.

**New Orleans-Hosiery and Yarn Mill.**—The Orleans Varn and Hosiery Mills, Limited, has been granted a charter, its purpose being the manufacture of woolen and cotton yarns and hosiery. Simon Mayer, of New Orleans, is president; Isidor Mayer, of Clinton, vice-president, and, together with Eugene T. Worms, of New Orleans, they are the first board of directors. The capital stock is placed at \$100,000.

## MARYLAND.

**Baltimore-Brass and Iron Works.**—The McShane Manufacturing Co. will rebuild immediately that portion of its North-street plant that was destroyed by fire on the 10th inst.

**Baltimore-Distillery.**—The Robert Stewart Distilling Co.'s certificate of incorporation has been filed at Towson. The company's purpose is to continue the operation of Robert Stewart's distillery at Canton, Baltimore. The directors are Robert Stewart, Benjamin Bell, Isaac W. Mohler,

Jr., Diedrick Wischhusen and Thos. W. Donaldson, and the capital stock is \$125,000.

**Cumberland-Rolling Mill.**—Work has been commenced again in the Cumberland Iron Co.'s 16-inch mill. About fifty hands are employed.

**Cumberland-Cold-storage Plant.**—The Cumberland Ice Co. has resumed operations at its factory after a cessation of several weeks for necessary repairs. The company now intends to add a cold-storage department in the near future.

**Ellicott City-Stone Quarries.**—Albert Weber & Co. are installing three new steam drills at their stone quarries.

**Fairlee-Creamery.**—A creamery is reported as being built.

**Frederick-Canning Factory.**—Hardt & Keefer write that a Harford county firm will start a cannery.

**Frederick-Wire Works.**—Soult & Co. will erect new building to replace one lately burned and equip a plant for the manufacture of wire picket fences.

**Harney-Creamery.**—A creamery has recently been built and operations have commenced.

**Walston-Lumber Mills, etc.**—John W. Perdue of Salisbury, Md., has sold to E. H. Parsons, John F. Wimbrow and E. W. Parsons a tract of about 500 acres of timber lands at Walston's Switch for \$12,000. The purchasers will commence cutting at once, and Jackson Bros., of Salisbury, will manufacture most of the lumber. The lapwood will be taken to Parsonsburg and there manufactured into kiln dried kindling wood. Machinery has been purchased.

## MISSOURI.

**Newtonia-Creamery.**—W. L. Gentry, of Kansas, has leased the Newtonia creamery and will put it in operation.

**St. Louis-Lubricator Company.**—Havilah G. Brown, Otto C. Bogasch and Henry F. Allemeier have incorporated the Brown Light Feed Lubricator Co. with a capital stock of \$10,000.

**St. Louis-Rubber Company.**—William Rowe, Julius Gatzsch and August Plitt have incorporated the Mound City Duck & Rubber Co. with a capital stock of \$25,000.

**St. Louis-Pump Company.**—P. J. Doerr, C. M. Parker and L. R. Buder have incorporated the St. Louis Wood Pump & Pipe Co. with a capital stock of \$10,000.

**St. Louis-Dairy.**—William Grafeman, J. H. Rouche, W. A. Harrison, W. E. Burr and L. G. Burr have incorporated the Grafeman Dairy Co. with a capital stock of \$130,000.

## MISSISSIPPI.

**Durant-Wagon Works.**—The Love Wagon Co., whose works were destroyed in October last, will rebuild at once under the style of Love Bros. A. J. Love can be addressed.

## NORTH CAROLINA.

**King's Mountain-Tannery.**—Clayton & Ware are building a tannery near King's Mountain.

**Madison-Handle and Spoke Factory.**—J. C. Dundas, now of Statesville, N. C., intends to establish a handle and spoke factory in Madison.

**Marion-Saw Mill.**—W. H. Hester is erecting a saw mill on Mud Cut creek, one mile from Marion.

**New Berne-Saw and Planing Mills.**—F. Kozh, W. F. Aberly, Henry Hawk and Freeman Hawk, all of Pennsylvania, have leased Lovitt Hires's planing mill at New Berne, and will continue the operation of same under the name of the Pine Lumber Co. They will also erect a new saw mill of 20,000 feet capacity daily, and build a new dry-kiln.

**New Berne-Knitting Mill.**—Henry Rushton has added new knitting machines to his mill, thus doubling its capacity.

**Raleigh-Tobacco Factory.**—Van B. Moore and Philip Taylor will engage in the manufacture of plug tobacco.

**Rocky Mount-Canning Factory.**—It is reported that a cannery with evaporating and pickling departments will be established.

**Statesville-Shoe Factory.**—A shoe factory will be erected, and work on the building will commence at once. The Statesville Development Co. can give information.

**Waynesville-Sash, Door and Blind Factory.**—The Waynesville Hardwood Co. will add new machinery to its plant and engage in the manufacture of sash, doors and blinds.

## SOUTH CAROLINA.

**Bath-Cotton Mill.**—The new cotton-mill company stated in the last issue of the MANUFACTURERS' RECORD as being formed by Messrs. Estes, Barrett and others has been granted a

charter under the name of the Aiken Manufacturing Co. The incorporators are H. M. Dibble, F. B. Henderson and John G. Evans, all of Aiken, S. C., and Thomas Barrett, Jr., and Charles Estes, both of Augusta, Ga., and the capital stock is placed at \$400,000. The company's intention is to build a 15,000-spindle mill.

**Charleston—Detective Agency.**—A charter has been issued to the South Carolina Detective Agency of Charleston. W. F. A. Holland is president and general manager, and D. C. Weeks, secretary and treasurer; capital stock \$3000.

**Florence—Cottonseed-oil Mill.**—The Florence Cotton Oil Mill Co., reported in the last issue of the MANUFACTURERS' RECORD, is simply a reorganization of the Florence Cotton Oil Co. and not a new concern.

**Spartanburg—Cotton Mill.**—It is reported that C. E. Fleming will organize a company to erect a cotton mill on a water-power which he has purchased in Spartanburg county.

**Westminster—Lumber Company, etc.**—R. E. Mason, J. H. Barnett and C. E. Mason have incorporated the Westminster Lumber Co. for the purpose of transacting a general lumber and merchandise business. The capital stock is \$10,000.

#### TENNESSEE.

**Bristol—Iron Furnace.**—It is reported that Stephen N. Noble, of Anniston, Ala., is still negotiating for the Bristol furnace, with a view to putting it in blast at once. Mr. Noble is said to be visiting New York and Philadelphia at present in order to complete negotiations.

**Chattanooga—Cider and Vinegar Works.**—D. F. Witsell & Co., late of Charleston, S. C., have commenced the manufacture of cider and vinegar in Chattanooga.

**Fountain City—Improvements.**—It is said that the Fountain City Land Co. will, in the spring, expend \$10,000 in improvements.

**Knoxville—Marble Mill.**—The Tennessee Producers Marble Co., which decided last spring to erect a large marble mill, has commenced work on same. The plant is to be 80x250 feet in size, will hold forty gang saws and cost, complete, about \$100,000. The mill is expected to be ready for operation within sixty days. Hon. Redfield Proctor, of Vermont, is president of the company; W. B. McMullen, vice president, and J. J. Craig, secretary.

**Lynnville—Saw and Planing Mill.**—A Mr. Riggs, of Murfreesboro, has erected a saw and planing mill in Lynnville.

**Memphis—Electric-light Plant.**—The Equitable Gas Light Co. contemplates erecting an electric-light plant, and has filed a petition with the city council for the necessary privileges. Wm. Katzenberger is president of the company.

**South Pittsburg—Pipe Works.**—The South Pittsburg Pipe Works are about to resume operations after a short shutdown for repairs.

#### TEXAS.

**Beaumont—New Machinery.**—The Beaumont Lumber Co. has put in its mill a new eight-roller surfacer and matcher.

**Corsicana—Water Works.**—The citizens are talking of constructing water works to supply the city. The mayor can doubtless inform.

**Dallas—Ice Company.**—Philip Lindsley, Henry Lindsley and J. W. Lindsley have incorporated the Crystal Ice Co. of Dallas and Oak Cliff with a capital stock of \$20,000.

**Dublin—Mercantile.**—The McCain Trading Co. has been incorporated with a capital stock of \$10,000.

**Fort Worth—Bottling Works.**—The Carera Manufacturing Co., noted last week as incorporated, has for its purpose the transaction of a general bottling business. The machinery has been secured from a Boston firm. Frank J. McCarthy is president; Stephen Casey, vice-president, and J. F. P. Carera, secretary and treasurer; capital stock \$25,000.

**Fort Worth—Publishing.**—A newspaper to be called the Evening Telegram will be published. Address C. W. Hoelzle, general manager, for information.

**Gainesville—Water Supply.**—The citizens have in hand a project for securing artesian wells to supply the city with water, and a resolution has been presented to the city council asking it to take legal steps in the case. The mayor can be addressed for information.

**Galveston—Abstract Company.**—J. C. League, G. Seligson and H. W. Truehart have incorporated the Island City Abstract Co. with a capital stock of \$20,000.

**Galveston—Chemical Works.**—The chemical works reported in the last issue of the MANUFACTURERS' RECORD as established in charge of Messrs. Lablatt & Lablatt, Twenty-second street near Strand, who can be addressed for further particulars.

**Hewitt—Water Supply.**—A stock company has been organized, it is reported, for the purpose of securing artesian water for Hewitt.

**Houston—New Machinery.**—A. Thaison is adding to his brick works at Houston Heights new ma-

chinery for the manufacture of pressed brick at a cost of \$18,000.

**Houston—Bed and Lounge Factory.**—A plant is being equipped at Houston Heights for the manufacture of beds and lounges. Charles Miller, late of Cleveland, Ohio, is in charge.

**Rhine—Grain Elevator.**—W. J. Rogers, who lately purchased the Rhine roller flour mill, will erect a 20,000-bushel grain elevator as soon as plans can be prepared.

**Texarkana—Sewerage System.**—A sewerage system will be constructed by W. H. Ward, of Little Rock, Ark., and his associates. (See notice under Texarkana, Ark.)

**Waxahachie—Water Works.**—A committee has been formed to solicit stock to a company which proposes constructing water works. C. W. Gibson and Osee Goodwin can give information.

#### VIRGINIA.

**Graham—Manufacture.**—J. M. Matthews has started the manufacture of a key-ring which he has patented.

**Norfolk—Sewers.**—A bill has passed the State legislature authorizing the city to issue \$165,000 in bonds for paving and sewer construction. The mayor can give information.

**Pulaski City—Zinc Furnace.**—Thomas Jones, formerly manager of the Bertha Zinc & Mineral Co., has erected a furnace for turning out 1200 pounds of zinc daily. A new method is being used at this plant.

**Richmond—Gas Works Improvements.**—The board of aldermen has adopted an ordinance appropriating \$35,000 in city bonds for the purpose of enlarging and improving the purifying capacity of the gas works. For further particulars address the mayor.

**Staunton—Woolen Mill.**—B. F. Williams, of Winchester, is endeavoring to enlist the business men of Staunton in a project for the erection of a woolen mill. Mr. Williams is said to propose a one-set mill to cost about \$7000.

**Suffolk—Barrel and Box Factory.**—A. B. Miner, S. Calhoun and H. McClellan have formed a partnership and will erect a plant for the manufacture of truck barrels, boxes and crates. A building has already been built and the machinery will shortly be installed.

**West Norfolk—Lumber Plant.**—The West Norfolk Lumber Co., whose plant was burned several weeks ago, held its annual meeting on Tuesday last and decided to rebuild at once on an enlarged plan. The West Norfolk Land & Improvement Co. has donated water front and site.

**West Point—Water Works.**—A bill has passed the State legislature authorizing the mayor and council of West Point to issue bonds to construct water works for fire protection. The bill provides that the issuance must be ratified by a three-fifths vote. For further particulars address the mayor.

#### WEST VIRGINIA.

**Fayette Station—Coal Mines and Coke Ovens.**—The Turkey Knob Coal Co. will develop coal lands on an extensive lease which they have secured on Loup creek. A branch railway will be constructed, coal tipples put up and coke ovens built. F. A. Beardsley is the engineer in charge and the plant is to be completed by April 1. The company's address is probably either Fayette Station or Loup Creek (Deep Water P. O.)

**Kearneysville—New Machinery.**—The Standard Stone & Lime Co. is reported as to erect another stone crusher.

**Leon—Coal Mines.**—A company is being organized, it is reported, for the purpose of sinking a shaft for coal; operations to commence at the mouth of Thirteen-Mile creek.

**Parkersburg—Oil Company.**—The Ohio River Oil Co. has been chartered with a capital of \$15,000. The incorporators are A. A. Hopkins, of Pittsburg, Pa.; Charles W. Brown, E. Sarre, Olive B. Sarre, of Stroudsburg, Pa., and J. B. Chapman, of Pittsburg, Pa.

**Point Pleasant—Bridge Works.**—W. E. Heslop, David Pierce, A. L. Boggess, G. Poffenbager and W. N. Howard have incorporated the West Virginia Bridge Co. for the purpose of designing and manufacturing bridge iron, columns, etc. The capital stock is placed at \$50,000.

**Weston—Water Works.**—An Eastern party has written regarding forming a company to construct water works. The matter has been referred to the city council and the mayor can be addressed for information.

**Wheeling—Saw Mills.**—John W. Beltz, John W. Beltz, Jr., Henry Beltz, John Koehler, J. C. Paul and Henry Kell have incorporated the J. W. Beltz & Sons Co. for the purpose of operating saw mills. The paid-in capital is \$34,700.

**Wheeling—Mercantile.**—K. J. Hoge, of Wheeling; G. M. Brown, of Morristown, Ohio; Wm Rogers, L. J. Rogers and Arthur Rogers, of Barnesville, Ohio, have incorporated the K. J. Hoge Co. for mercantile purposes. The capital stock is \$30,000.

#### BURNED.

**Atlanta, Ga.**—Joseph Jacobs's patent medicine establishment; loss on building and stock \$80,000.

**Baltimore, Md.**—Fire in the McShane Manufacturing Co.'s North street works caused a damage of \$200,000 to patterns and \$15,000 to machinery. It is said that work will be resumed in a few days.

**Barboursville, Ky.**—F. Houson's storehouse; loss \$15,000.

**Bismarck, Mo.**—A. D. Boss's roller flour mill; loss over \$15,000.

**Burcham Mills, Ala.**—Embry, Son & Young's cotton mill of 2500 spindles and thirty looms; loss estimated at between \$20,000 and \$25,000.

**Canton, Miss.**—Stores of C. L. Gross, Hesdorffer Bros. and A. J. Sneed, Jr.; loss on buildings \$15,000.

**Chattanooga, Tenn.**—Part of the Southern Hotel and the building of the People's Grocery Co.; loss estimate on buildings \$45,000.

**Columbiana, Ala.**—Storehouses of E. D. Hall & Co., Parker & Armstrong and J. R. Beavers.

**Davis, W. Va.**—J. W. Hockman's opera-house and stores of Rosenthal & Co. and Schatzer & Co.; loss estimate \$30,000.

**Durant, Miss.**—Edward Matthews's gin and saw mill, located six miles north of Durant.

**Fort Meade, Fla.**—F. F. Hendry's storehouse; loss estimate \$35,000.

**Jefferson Barracks, Mo.**—Several shops and officers' quarters; loss \$50,000.

**Mannington, W. Va.**—L. G. Robinson's planing mill; loss about \$15,000.

**Memphis, Tenn.**—Stratton & Dunn's cotton warehouse; loss estimate \$15,000.

**Memphis, Tenn.**—Arbuckle, Sons & Co.'s cotton warehouse; loss estimate \$15,000.

**Ocala, Fla.**—Silver Springs Hotel; loss estimate \$5000.

**Salcisa, Ky.**—William Jarvis's flour mill; loss \$10,000.

**St. Louis, Mo.**—The Eagle Machine Works; loss \$10,000.

**St. Louis, Mo.**—The Woode-Maude Milling Co.'s corn-meal mill; loss \$15,000 and insured for \$75,000.

**St. Louis, Mo.**—Laundry and blacksmith shops at Jefferson Barracks; loss between \$10,000 and \$20,000. The commandant can probably give information.

**Waco, Texas.**—The Missouri, Kansas & Texas Hotel; loss estimate \$10,000.

**Willow Springs, Mo.**—Duke and Gulf Hotels, Livingston's and Sommers's stores; loss \$10,000.

#### BUILDING NOTES.

**Abilene, Texas—Church.**—The Second Baptist congregation will erect a new edifice and has had plans prepared. Address the pastor.

**Belair, Md.—Church.**—The building committee of the Episcopal congregation intends erecting a new church and are raising funds for that purpose.

**Columbia, S. C.—College Addition.**—The teachers' house of Benedict College, recently burned, will be rebuilt. Address C. E. Becker, president of the faculty.

**Columbiana, Ala.—Storehouses.**—It is reported that the storehouses of R. D. Hall & Co., Parker & Armstrong and J. R. Beavers, recently burned, will be replaced by brick structures.

**Elberton, Ga.—Courthouse.**—It is reported that contracts are about to be let for the new courthouse to be built in Elberton. Address the mayor.

**Hagerstown, Md.—Hall.**—Architect Dayhoff has prepared plans for a hall it is proposed to build for a fire company to cost \$10,000.

**Hanover C. H., Va.—Church.**—The building committee of St. Paul's Church are raising funds to erect a new edifice. Address the rector.

**Harriman, Tenn.—Hall.**—The Harriman Post of the G. A. R. has decided to raise a fund to build a memorial hall in connection with the Harriman University to cost \$25,000.

**Houston, Texas—School.**—The city will receive bids for building the high school to cost \$75,000 until March 6. Address Eugene T. Heiner, architect.

**Houston, Texas—Church.**—It is reported that a site has been purchased for the Presbyterian church it is proposed to build in Houston at a cost of \$50,000. Hon. Henry Brashear is interested.

**Louisville, Ky.—Church.**—The congregation of St. Peter's Evangelical Church will erect a new edifice. Address the pastor.

**Macon, Ga.—Hospital.**—It has been decided to spend \$10,000 on the hospital to be built in Macon. City Councilmen Findlay or Hill may be addressed.

**Memphis, Tenn.—Theatre.**—It is reported that work is to begin on the new Lyceum Theatre by March 1 and that it is to be completed by September 1. John Mahoney is interested.

**Mobile, Ala.—Hotel.**—Stockholders of the Battle

House are considering an issue of \$100,000 in bonds to improve and enlarge the hotel.

**Roanoke, Va.—College Building.**—An addition to the Virginia Ladies' College is to be built some time this year. Dr. W. A. Harris, the principal, may be addressed.

**Rusk, Texas—Institute.**—An institute building to cost about \$10,000 is to be built in Rusk. Address Rev. J. H. Thorne.

**Snow Hill, Md.—Courthouse.**—The county commissioners have decided to build a new courthouse in place of the present structure. Address the town clerk.

**Southport, N. C.**—The government, it is reported, will erect barracks at Fort Caswell in place of the present structures.

**St. Augustine, Fla.—Church.**—A site has been donated by H. M. Flagler for a Baptist church on which a building to cost \$10,000 will be erected. Address T. W. Estes.

**Tavares, Texas—Hotel.**—It is reported that the Peninsular Land, Transportation & Manufacturing Co. will erect a hotel for a winter resort to contain 250 rooms. President St. Clair-Abrams may be addressed.

**Texarkana, Fla.—School.**—The corporation has decided to issue bonds to build a school to cost about \$15,000. Address the mayor.

**Washington, D. C.—Apartment-house.**—Architect T. F. Schneider has prepared plans for an \$80,000 apartment-house 50x110 feet, to be built of brick and brownstone.

**Washington, D. C.—Dwellings.**—B. Stanley Simmons has prepared plans for four three-story dwellings to cost \$15,000. L. E. Caruthers will be the owner.

**Welch, W. Va.—Courthouse.**—The county court will receive bids until January 24 for the brick courthouse and jail. The former is to contain a courtroom, judges' room, three jury-rooms, offices of county and circuit clerks, with vaults, also sheriff and attorney and one other official.

#### RAILROAD CONSTRUCTION.

##### Railroads.

**Charleston, W. Va.**—The Chesapeake & Ohio branch to the Turkey Knob Coal Co.'s mines at the head of Loup creek is to be completed, it is stated, by April 1, 1894.

**Decatur, Tenn.**—Meigs county people are considering the idea of voting \$50,000 in bonds for the proposed Fairmount Valley road from Cartersville, Ga., to Cumberland Gap. M. Aubry, of Cartersville, is interested.

**Little Rock, Ark.**—The Little Rock, Hot Springs & Texas road is to be about sixty miles long and will be laid with 60-pound steel rails. It will require about 3300 ties per mile, and five large iron bridges will be needed; also considerable mason work, as well as several deep cuts and high embankments. Surveys are now being made. Address Uriah Lott, president, or J. P. Nelson, engineer.

**Lumberton, N. C.**—The Lumberton & Lumber Bridge Railway Co. has been organized to build a road between the points named, a distance of twenty five miles.

**Marksville, La.**—The police jury is considering the project of having a railroad built from Bunkie, La., to a point on the Houston Central. A vote of the people will be taken on the question of levying a tax. F. M. Welch, of Alexandria, is said to be interested.

**Mobile, Ala.**—It is stated that the Mobile & Ohio has decided to build a branch about fifty miles long from a point on the Montgomery, Tuscaloosa & St. Louis branch (now being built) in Bibb county to Birmingham. The road is to pass through Bessemer and Blocton. J. C. Clarke, at Mobile, is president and general manager.

**Morgantown, W. Va.**—The State Line branch of the Baltimore & Ohio has been completed across the Cheat river, and it is expected to have the whole line in operation by March 1.

**Opelika, Ala.**—It is stated that the bonds to build the proposed electric railway from Auburn to Opelika, seven miles, have been sold, and that work is to begin in a few days. Address John L. Cowan, Opelika.

**Plant City, Fla.**—Regarding the proposed road from Plant City to Fort Meade, it is stated a charter has been granted, and that the road may be built by the Florida Central & Peninsular. F. W. Merrin is interested. No bonds have been issued or contracts let.

**Richmond, Va.**—W. H. Brauer, G. C. Vincent and others have become interested in a company with \$50,000 capital to build a road from a point in Henrico county to the James river, sixteen miles distant.

**Victoria, Texas.**—It is stated that a plan is being matured to complete the Pan-American road, recently sold by the sheriff, to a connection with the Missouri, Kansas & Texas at La Grange, eighty miles distant. J. J. Sullivan is interested.

**Wilmington, N. C.**—It is rumored that the syndicate which has obtained control of the Cape Fear

& Yaddin Valley will build the proposed extension of the road from Mount Airy, N. C., to a point on the Norfolk & Western, thus giving a new line from Wilmington to the coal mines. The extension would be about thirty-five miles long.

**Wyandotte, Ark.**—T. C. Hamlen, of Portland, Me., and B. F. Copeland, of Little Rock, are among the incorporators of a road projected from Wyandotte fifteen miles into the timber country of Hot Springs county. The company is to be called the Wyandotte & Southeastern. The capital is fixed at \$300,000.

#### Street Railways.

**Augusta, Ga.**—The contract for the material for the North Augusta electric road has been made, and the road will be operated, it is said, by the Augusta Railway Co. Walter Jackson may be addressed.

**Baltimore, Md.**—Contracts for completing the wiring of the Pennsylvania-avenue division of the City Passenger Railway system have been awarded. It is expected to have the line operated by electric motors by March 1.

### MACHINERY WANTED

If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.

**Bakery Machinery.**—J. Q. Adams, Lexington, Ky., wants to correspond with manufacturers of machinery for a steam bakery.

**Belting.**—The West Norfolk Lumber Co., West Norfolk, Va., will buy belting.

**Boiler and Engine.**—The new Pine Bluff Furniture Factory, Pine Bluff, Ark., will probably want a boiler and engine. Address in care of E. B. Bloom.

**Boiler and Engine.**—The Toccoa Furniture & Lumber Co., Toccoa, Ga., wants to buy a thirty horse-power engine and boiler, new or second-hand.

**Box Factory.**—The West Norfolk Lumber Co., West Norfolk, Va., will buy entire outfit of machinery for box factory.

**Broom Machinery.**—Le Grand & Hamilton, 832 South Twenty-fourth street, Birmingham, Ala., want to correspond with manufacturers of broom machinery.

**Corn and Meal Mill.**—The Branner Mill, Mossey Creek, Tenn., wants a mill to grind corn in the ear, and one to make bread meal.

**Dry-kiln.**—The Learned-Letcher Lumber Co., Anniston, Ala., wants to buy a good second-hand dry-kiln of about 10,000 feet of lumber daily capacity.

**Electric-lighting Machinery.**—The Opelika Electric Light & Power Co., Opelika, Ala., is in the market for an alternating incandescent machine of 750 or 1000 lights.

**Engine and Boiler.**—The Royal Phosphate Co., High Springs, Fla., is in want of a good second-hand upright engine and boiler of about six or eight horse power capacity.

**Flooring Machinery.**—The Toccoa Furniture & Lumber Co., Toccoa, Ga., wants to buy a fast-footed flooring and crilling machine, new or second-hand.

**Flour-mill Supplies.**—J. P. Thomasson, Williamsburgh, W. Va., wants screen and bolting cloth.

**Gas Engine.**—P. F. McDonnell, Weston, W. Va., wants a second-hand gas engine of five to ten horse power in good condition.

**Ginning Machinery.**—W. B. Makinson, Kissimmee, Fla., wants to correspond with manufacturers of machinery for ginning Hondo moss.

**Hoisting Engine and Boiler.**—Fisher & Henderson, Athens, Tenn., want to purchase a small hoisting engine and boiler of from fifteen to twenty horse power for drawing ore up a 45-degree slope about 100 feet long; second-hand machinery in good condition preferred.

**Horse-power Plant.**—R. T. Steedly & Co., Forest, Miss., will want soon one or two horse-powers.

**Logging Engine.**—L. A. Mullican, Eden, Ala., wants to buy a second-hand logging engine, not smaller than seven-ton nor larger than 10-ton, for standard gauge, flat rail.

**Paint Mills.**—H. W. Wells, Monticello, Ark., wants to correspond with manufacturers of paint mills.

**Pipes.**—The city of Boston, Mass., will open sealed proposals on January 31 for furnishing a large lot of cast-iron water pipe for its water

works. Address the water board for full particulars, estimates of quantities, etc.

**Piping.**—The West Norfolk Lumber Co., West Norfolk, Va., will buy piping.

**Planers.**—The West Norfolk Lumber Co., West Norfolk, Va., will buy planers.

**Planing Mill.**—The West Norfolk Lumber Co., West Norfolk, Va., will buy entire outfit of machinery for planing mill.

**Pressure Gages, etc.**—The Reliance Lumber & Manufacturing Co., 210 East Lexington street, Baltimore, Md., is in the market for recording pressure gages and recording thermometers for high temperature use in connection with a new dry-kiln.

**Pulleys, etc.**—The West Norfolk Lumber Co., West Norfolk, Va., will buy shafting and pulleys.

**Pumps.**—The Lakeside Mills, Burlington, N. C., want two second-hand underwriters' steam fire pumps, 500 to 600 capacity per minute.

**Rails.**—The Reliance Lumber & Manufacturing Co., 210 East Lexington street, Baltimore, Md., wants 12 pound T steel rails.

**Refrigerating Machine.**—P. F. McDonnell, Weston, W. Va., wants a good refrigerating machine at a low figure.

**Resaws.**—The West Norfolk Lumber Co., West Norfolk, Va., will buy resaws.

**Roofing.**—Jno. Shepard & Co., Franklin, N. C., want prices on iron roofing.

**Saw Mills.**—Jno. Shepard & Co., Franklin, N. C., want prices on saw mills.

**Sewage-disposal Plant.**—Sealed proposals will be received by the city of Reading, Pa., until January 29 for the erection of a sewage-pumping plant of 5,000,000 gallons capacity per hour; bidder to furnish plans and specifications. Address S. S. Hoff, city engineer, for full particulars.

**Shingle Machine.**—George Peacock, Selma, Ala., has a customer for a six-block shingle machine.

**Tannery Machinery.**—The People's Tanning and Manufacturing Association wants to buy a machine for splitting hides; second-hand will do. Address A. J. Cooke, treasurer, Cumberland, Miss.

**Wire Screen.**—The Royal Phosphate Co., High Springs, Fla., is in want of perforated steel and woven-wire screen material.

Mr. J. T. Beeks, of Orlando, Fla., wants to correspond with metal manufacturers of small articles, such as the "Sword book-marker and cutter."

Messrs. Noone, Ager & Co., of Bluefield, W. Va., want prices on all kinds of dressed lumber, such as sash, doors, blinds, etc., and all other building materials used by contractors; they would also like to correspond with manufacturers of glass.

Messrs. Zirkell & Patterson, of Harrison, Va., want to correspond with firms handling turned heading.

Major A. M. Miller, U. S. A., Galveston, Texas, will receive proposals until January 20 for dredging in Trinity river, Texas.

The city of Newnan, Ga., is in the market for hose reels or carts. Address Thomas Camp.

It is reported that the Chesapeake & Ohio Railroad Co., of Richmond, Va., will soon be in the market for several hundred coal grain and refrigerator cars. Decatur Axtell is vice president.

H. W. Wells, of Monticello, Ark., wants to correspond with parties interested in the manufacture of mineral paint.

Le Grand & Hamilton, of 832 South Twenty-fourth street, Birmingham, Ala., want to correspond with dealers in broom corn.

The R. D. Cole Manufacturing Co., of Newnan, Ga., will soon be in the market for plumbing supplies, iron pipe, block and galvanized, etc.

### TRADE NOTES.

The Kelly Foundry & Machine Co., of Goshen, Ind., has issued a new illustrated catalogue of its steam boiler specialties for 1894. This concern's rapidly-increasing business has made it necessary for it to enlarge its works and increase facilities to such an extent that it is now prepared to furnish promptly castings of every description in the boiler specialty line. Especial attention is called to the Kelly Company's complete outfit for furnishing every cast-iron pipe that goes into a boiler setting, and its frons are ready to set up when they leave the works.

Messrs. Paschke & Kelley, civil engineers, Room 90, World's Building, New York city, take pleasure in announcing that they have opened an office to do general engineering work, making a specialty of investigating, reporting upon and superintending railway, mining and all other engineering enterprises in Spanish America. Mr. Paschke having been for the past nine years government engineer for the republic of Guatemala, in Central America, and Mr. Kelley having been in charge of the third corps of engineers for the inter-continental railway commission in South America, makes them entirely familiar with the languages, customs and peculiarities of these

countries. Previous to this both have had an extensive professional experience on various well-known public works in and about New York and various important railway enterprises throughout the United States. Messrs. Paschke & Kelley believe themselves specially well qualified for such work, and invite the attention of firms or companies contemplating the employment of engineers.

The Charles Munson Belting Co., of Chicago, writes the MANUFACTURERS' RECORD as follows: "Our business, considering the hard times we have had this year has been very good; in fact, it has been beyond our anticipations. We have every reason to believe that we have had a better trade than any other manufacturer in our line of business. We have gained a great many new customers, which is probably due to the company's changing hands and the business being conducted in a more satisfactory way to our customers, but the main advantage that we can see in our trade this year is on account of the quality of the leather. The Munson Eagle belt is fast gaining a reputation as being a superior belt to any other upon the market, and those who have used the Munson belt say that they notice a saving in their belt account. The people do not have trouble in taking up their belts on account of slack. The belts transmit full horse power. We have lately issued a new illustrated catalogue, where we explain fully how we manufacture our belting, and guarantee that there is no piece of belt longer than four feet two inches in our factory." Parties desiring catalogue will receive same on application.

Another very significant step has been taken by the Courtenay Manufacturing Co. regarding its new cotton mill at Newry, near Seneca City, Oconee county, S. C. W. B. Smith Whaley, the well-known mill engineer of Columbia, S. C., had ordered the patent metallic roll throughout the railway and drawing for both this mill and the new mill of the Union Manufacturing Co., Union, S. C. Now he has ordered this system throughout the speeders and fine frames of the Courtenay mill. This mill, therefore, will have none of the leather-covered rolls except on the spinning-frames, and it may be one of the first mills to have the metallic roll on spinning. It was also desired to have metallic rolls on the Union fine frames, but the Metallic Drawing Roll Co., Indian Orchard, Mass., was not able to get out the rolls in time for that mill. The company has also received an order, through the Charlotte Machine Co., H. S. Chadwick, president and treasurer, for the patent metallic rolls for thirty-six deliveries of Pettee drawing for Captain Dilling's mill at King's Mountain, N. C. Another lot of these patent metallic rolls is also being furnished for the Mammoth Springs Cotton Mills, Mammoth Springs, N. C. As is well known, these patent metallic rolls are running in many very large Southern mills, and it is not too much to say that when they are started in the new duck mill at Columbia, S. C., and the new fine mill of the Courtenay Manufacturing Co., these mills will be the Mecca of many superintendents and carders, who will be interested in seeing the work of metallic rolls on the finer processes.

### California Excursions.

The well-known Phillips Excursion Co. has arranged to run weekly excursions to all principal California and other Pacific coast cities from all points on the Baltimore & Ohio Railroad. The parties will leave the East on Wednesday of each week commencing January 17, and passengers will be booked through to destination. There are no Pacific coast tours offering as good accommodations at less expense. For full information address A. Phillips & Co., No. 111 South Ninth street, Philadelphia, or call on nearest ticket agent Baltimore & Ohio Railroad Co.

READ HOUSE, Chattanooga, Tenn., is one of the most favorably-known hotels in the South; attested by its register record; second to none in the number of names enrolled therein daily. Its situation immediately in front of the union depot, and at the same time in the centre of the business portion of the city, makes it at all times the commandant of the patronage of the tourist as well as commercial man, who have made it headquarters in Chattanooga for years. We bespeak for the Read continued popularity.

GRAHAM COUNTY, N. C., is now ready to receive bids on her new \$12,000 courthouse; time open for bids till February 1, 1894. For plans and specifications of the same address or call on W. F. Mauney, register of deeds of Graham county, N. C. The county of Graham also wants to place the bonds for the same, bonds to run thirty years at not more than 6 per cent. interest. Call on or address the undersigned for any further information. W. F. Mauney, clerk ex-officio to the board of county commissioners, Graham county, N. C.

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Low-Rate California Excursions.	
Every Thursday evening a personally-conducted low-rate tourist excursion to California leaves Cincinnati via the Queen & Crescent Route to New Orleans, and Southern Pacific Railway from New Orleans to San Francisco. Tourist sleeping cars on these excursions run through from Cincinnati to San Francisco without change. This is the only through-car line from Cincinnati to California. Ticket rate from Cincinnati, \$51.50; berth in sleeping car only \$4.00. Ask agents for further information or address W. P. Cooley, D. P. A., Cleveland, Ohio; C. A. Baird, D. P. A., Detroit, Mich.; or Chas. W. Zell, D. P. A., Cincinnati, Ohio. W. C. Kincerson, G. P. A., Cincinnati, Ohio.	